HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 20, NO. 8, ABSTRACTS 1051-1200. AUGUST 1980

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HOSPITAL ABSTRACTS

Vol. 20 August, 1980 No. 8

HOSPITALS IN GREAT BRITAIN

1051. HELMAN, C. G. **An anthropological view of the modern hospital.** *Mims Magazine*, Teddington, 1980, July 1, pp. 37, 38, 40, 41.

The hospital has its roots in ancient times, but only since the 19th century has it really played such an important role in our lives. Most people are born in hospitals and will die in them; between these two events the hospital will become the focus for intensive emotional experiences for people, or their friends, or their relatives. To understand these experiences, the hospital is viewed objectively—as if through the eyes of a hypothetical Martian anthropologist. The hospital is seen as a miniature city in which most of the rules of the outside world cease to apply. Aspects of the hospital discussed include: specialization and classification; admission to hospital; the patient in the ward; the ward society; and comparison with general practice. It is important that doctors be aware of the differing emotional and social impacts of hospital medicine and general practice, and of their long-term effects on patients' health.

1052. **Observations on the Flowers report from the Royal College of Surgeons of England.** *Lancet*, London, 1980, June 21, vol. i, no. 8182, pp. 1352, 1353.

The Council of the Royal College of Surgeons reviews with considerable reservation the Flowers report and the report of the London Health Consortium concerning the future of medical education in London. The College rejects the view that the creation of large units leads to better standards and economic benefits. It also believes that postgraduate medical education should remain in its separate institutions and not be integrated with general teaching hospitals. The College is very keen to retain the role of the Institute of Basic Medical Sciences in providing a core of advanced applied science as a basis for the teaching of new methods of specialist practice. London University would be destroying a valuable asset if it withdrew academic recognition from this Institute, which is financed largely by the College. The College deplores the failure of the Flowers working party to carry out adequate consultations with dental teaching hospitals, and applauds the setting up of a dental advisory group to examine further the report's proposals for dentistry. In conclusion, the College believes that rationalization of resources and maintenance of standards would best be achieved by negotiations between institutions rather than by amalgamation.

HOSPITALS IN OTHER COUNTRIES

See also Abstract No. 1080

1053. NEUMANN, Bruce R. **A statistically based method for identifying hospital classification criteria.** *Public Health Reports*, Washington, D.C., 1980, May/June, vol. 95, no. 3, pp. 232-242.

The author describes a statistically based model for identifying hospital classification

criteria which can be used to group hospitals according to their performance characteristics. An automated interaction detector (AID) algorithm was used to select characteristics by which large community hospitals could be classified. The data base for the classification system was a set of 92 community hospitals situated throughout the United States. Data on the hospitals for the years 1970 and 1971 were obtained from Hospital Administrative Services. The AID was used to identify relationships between a hospital's services and its operating costs, as certain services have higher costs than others. The application of AID is described in detail. The characteristics of the hospitals used as input to the AID are listed, along with the number of hospitals having that characteristic. By using AID, the list of 26 characteristics was reduced to a more manageable set of classification criteria. The ranking of hospitals based on these criteria closely approximated to their ranking based on total costs, costs per patient day and costs per admission, showing that, increased services corresponds to an increase in costs. The method described could be used by a Federal or State agency that is considering the use of hospital classification criteria for reimbursement purposes.

1054. BUTLER, Patricia A. **Assuring the quality of care and life in nursing homes: the dilemma of enforcement.** *North Carolina Law Review*, Chapel Hill, N.C., 1979, Aug., vol. 57, no. 6, pp. 1317-1382.

Many of the elderly infirm or disabled could be cared for in their own homes, but Medicaid and Medicare create almost insurmountable obstacles to the development and survival of out-patient long-term care, at least in the forseeable future. However, nursing homes in general provide neither a dignified, homelike, supportive environment for their patients, nor the necessary rehabilitative services. Licensing and certification agencies tend to follow the hospital in-patient pattern, ignoring the special needs of the elderly infirm. This paper looks at possible means by which regulating agencies and the public, including nursing home residents themselves, can improve the quality of nursing home care by: (i) stimulating competition in an unregulated market; (ii) changing the regulatory focus; (iii) giving economic incentives for the provision of quality care; (iv) improving enforcement mechanisms; and (v) providing public involvement in nursing home quality of care enforcement. The legal, political and practical difficulties in implementing these are also discussed. Early indications of the effectiveness of new methods provide some hope for success, but the regulatory system must be revitalized and the public must be involved in the running of long-stay facilities.

1055. SPRI. Lokala sjukhem: åtta förslag till en bättre vård-och arbetsmiljö inom långtidssjukvården; Spris arkitekttävling 1979/80—inköpta och bearbetade förslag. [**Community nursing homes: eight proposals for improving the nursing and working environment in long-stay hospitals; Spri's architectural competition 1979/80—accepted and adapted proposals.**] Stockholm, Spri, 1980. 44pp. (Rapport 35)

In 1979 SPRI (The Swedish Institute for the Planning and Rationalization of Health and Social Care) organized a competition for the design of local long-stay nursing homes giving an improved patient care and working environment. Of the 55 entries received eight were accepted and adapted. This report gives details of each of these eight designs, including sketch drawings, photographs, floor plans, the architect's commentary and the jury's assessment. The recommended number of

patients was 14 to 18 with eight patients as a minimum for any unit. The competition results include many good examples of how a nursing care environment can evoke a domestic atmosphere.

1056. WESTERMAN, John H. **A requiem for the university hospital?** *Health Care Management Review*, Germantown, Md., 1980, vol. 5, no. 2, pp. 17-24.

Lack of identifiable stewardship, weak management with limited prerogatives, and a continuing saga of financial crisis have long been the hallmarks of university-owned hospitals in the United States. In spite of this they have made remarkable progress since 1966 and until recently their problems appeared to be manageable and the possibility of their demise premature. But time may be running out for them. The history and characteristics of the 65 university owned hospitals are reviewed. When the criteria of a successful organization are applied to them, they do not appear to be healthy organizations. Two basic courses appear to be open to them: (i) to maintain the status quo, allowing for periodic, incremental modifications; or (ii) to reconceptualize the role of the hospital within the university and create a new organizational framework. The latter is regarded as essential and means of achieving it are suggested.

1057. SIGMOND, Robert M. **Why neither competition nor regulation is the whole answer.** *Trustee*, Chicago, Ill., 1980, May, vol. 33, no. 5, pp. 35-38.

The author maintains that the full potential of competitive incentives and government regulations in health care services in the United States will be achieved only by effective interaction with voluntary incentives. Many hospital administrators are barely aware of government licensing requirements because they adhere voluntarily to the standards of the Joint Commission on Accredition of Hospitals, which are higher than those of government regulations. The keys to successful management are: (i) institutional mechanisms that encourage regulation and discipline; and (ii) voluntary agencies to set standards. A number of points concerning the relationship between competition and voluntary initiative which are often overlooked in discussions include: (i) market-place competition plays a significant role in determining hospital costs; (ii) competition for resources must be linked to area-wide planning; (iii) price competition is expanding beyond goods and services; and (iv) hospitals should join associations like Blue Cross to market hospital systems competitively. Hospital trustees should encourage responsible planning with due regard for their public service responsibilities. Rigid regulation should be avoided whenever voluntary regulation is feasible.

1058. ROSENSTIEHL, Christian. Les établissements hospitaliers des Houillères du Bassin du Nord et du Pas-de-Calais (H.B.N.P.C.). **[The hospitals of the Coal Mines Basins of the North and the Pas-de-Calais.]** *Techniques Hospitalières*, Paris, 1980, March, vol. 35, no. 414, pp. 45, 46.

When the coal-mining companies began their operations in Northern France in the 19th century they had to provide housing, schools, and even churches for their miners. Many built hospitals, originally for the treatment of injured miners; the miners' families were gradually allowed to use them, and specialist medical facilities, preventive medicine, and mother and child welfare centres were later established as well. In 1945, the French mines were nationalized, and the nationalized industry

retained responsibility for specifically hospital activities only. Three clinics for miners suffering from pneumoconiosis were established after 1954. In 1978, the eight miners' hospitals in the area decided to form an association and participate in the provision of a public hospital service; they are now carrying out an extensive modernization programme. Between them, these hospitals have 866 beds, of which 598 are surgical, 106 for diseases of the lungs, 72 for obstetrics and gynaecology, and 80 for rehabilitation.

PLANNING, DESIGN AND CONSTRUCTION

DETERMINING SIZE OF HOSPITAL AND BED NEEDS

1059. QUAETHOVEN, P. and COLLA, A. Patiëntenstromen en regionalisering. Een bijdrage. **[Patient flows and regionalization: a contribution.]** *Acta Hospitalia*, Leuven, 1980, vol. 20, no. 2, pp. 135-169.

This paper on hospital regions in the Flemish speaking area of Belgium is presented as a discussion document. It admittedly has many deficiencies; for example, the figures on which it is based cover acute hospitals only and are limited to a single year, but it is hoped that it will lead to further discussion and comment. Three possible levels of regionalization for the 158 hospitals and 68 'hospital communities' are set out: (i) one region for each 'hospital community' (i.e. 68 regions); (ii) each region to have at least 0.5 per cent of all hospital admissions (47 regions); and each region to have at least 1.0 per cent of all hospital admissions (13 regions). Two further proposals are made. The first is for eight regions with an average of about 700,000 inhabitants each and the second is for 10 regions of about 600,000 inhabitants. The composition of each region is set out in detail and five maps (one for each of the five types of region) show how the breakdown works out.

BUILDING: TENDERING, ETC.

1060. BUGMANN, Heinz. Projektbezogene Organisation für Krankenhäuser? **[Project-related organization for hospitals?]** *Krankenhaus-Umschau*, Kulmbach, 1980, May, vol. 49, no. 5, pp. 352, 354, 356, 358, 360.

The author describes the special 'project-related' organization which was set up in 1970 for three building projects in Switzerland; the nursing school at Aavan; a new stage for the Aavan Cantonal Hospital, and the new Baden Cantonal Hospital. The projects and their realization were carried out on the following principles: the formation of a partnership between building authority and contractor; project-related organization for the two partners; delegation of authority within the project organization; determining planning and realization stages; and cost control. Each of these principles is described. The introduction of this project organization was at first disputed but was quickly accepted by the authorities concerned. As a new group was 'inserted' between the 'planned' (the hospitals) and the planning (the architects) there was some tension which was eliminated when doctor and architect were again placed in direct contact.

BUILDING COSTS

1061. McCoid, D. **Cost control of health building projects.** *Project Manager*, [n.p.], 1980, Jan. 2, pp. 8-11.

Hospital building schemes in Great Britain are controlled by a system called CAPRICODE (Capital Projects Code) which has six stages: (i) outline project intentions (functional cost); (ii) planning (budget cost); (iii) design and cost planning (pre-tender estimate); (iv) contract and construction; (v) commission; and (vi) evaluation. Stage four relates to post-contract cost control and this paper is concerned with the COPE3 (Control of Project Expenditure) system used in it. COPE3 is a method of routinely and systematically predicting and controlling costs. It uses a series of 17 forms designed to record and process data and decisions. The forms and their use are described. By their use a constant flow of management information will be derived and presented for management action to be taken.

HOSPITAL DESIGN

See also Abstract No. 1055

1062. Rahat, E. **Integration of architectural, structural, mechanical and electrical systems in hospitals.** *Hospital Engineering*, London, 1980, June, vol. 34, no. 5, pp. 10-13.

The needs of the modern hospital can be met by a proper integration of architectural, structural and electro-mechanical systems. This integration is reflected, and can be implemented, by setting rules for design and by arranging electro-mechanical services and distribution. The interstitial space should contain and channel all piping, air-conditioning ducts, electrical wiring, communications systems, transport systems and utilities that are necessary for the operation of a hospital. Advantages of the system are flexibility, economy in design and construction, quality of work, easier and faster maintenance, and reduction in fire hazards. The real increase in cost for this system is about 12 to 15 per cent. Examples of hospitals using interstitial space cited are Shaare Zedek Hospital, Jerusalem, Israel; Jaffa Hospital, Israel; and Loma Linda Hospital, California.

1063. Paine, L. **Efficiency with humanity.** *Health and Social Service Journal*, Basingstoke, 1980, June 27, vol. 90, no. 4699, pp. 846-849.

As a result of his participation in the International Hospital Federation's study tour of West Germany, which visited 23 hospitals, the author compares a number of aspects of hospital and health services in West Germany and the United Kingdom. Among the points made are: West German hospitals are now forced to practice genuine economies; costs per patient day compare more than favourably with those in the UK; the British general practitioner service is more comprehensive, the psychiatric service infinitely better and nursing staff more numerous; emphasis in West Germany is less on changing the health care system and more on improving the planning, design and efficiency of hospitals; hospital accommodation standards and finish are considerably higher than those in the UK; and West German hospitals show an adventurousness in design which is difficult to achieve under the stricter controls of the UK.

DESIGN OF INDIVIDUAL HOSPITALS

1064. SCHANTY, Rudolf and ROSNER, Ulrich. Das neue Zentralkrankenhaus Bremen-Ost. **[The new East Bremen Central Hospital.]** *Krankenhaus-Umschau*, Kulmbach, 1980, June, vol. 49, no. 6, pp. 482, 489, 490, 492.

The new 800-bed 11-storey East Bremen Central Hospital was completed in December 1977. It consists of three circular tower blocks linked by a central core. Wards are on the 1st to 9th floors with normally a 30-bedded ward per floor in each block. Apart from a few four-bedded and three-bedded patients' rooms all are two-bedded, each with its own toilet and washing facilities. The circular ward design makes for short communication routes and better visual supervision from the central nurses' station. The 10th and 11th floors house ventilation and other technical installations and the bed centre. Areas in common use (cafeteria, administration, laboratories, X-ray etc.) are on the lower floors. The paper is illustrated with a ward floor plan and three photographs.

DESIGN OF SPECIAL HOSPITALS OR UNITS

See also Abstract No. 1160

1065. ARANYI, Laszlo and GOLDMAN, Larry L. **Design of long-term care facilities.** New York, London, Van Nostrand Reinhold, 1980. xiv, 210pp. bibliog. ISBN 0 442 26120 9 £22.15

Medical science has extended human life spans and increased the need for nursing homes and long-term care. This volume provides extensive information on starting, designing, and running an institution that best serves the needs of the elderly. Financing and site selection are amongst the topics covered in the early chapters, while later chapters are highly specific. The section on over-all design covers space needs, colour, odour control, security and safety, lighting, electrical systems, climate control, plumbing and acoustics. A later section deals with design of individual departments and facilities. The final section presents details of a dozen existing buildings.

GUIDING AND SIGNPOSTING

1066. AMERICAN HOSPITAL ASSOCIATION. **Signs and graphics for health care facilities.** Chicago, Ill., American Hospital Association, 1979. vi, 69pp. bibliog. ISBN 0 87258 179 9 $25.00

Clear signs and graphics are essential in hospital, where people are in a strange environment and often frightened or ill. This book describes site planning, which is essential for constructing a logical system of signing in new facilities. Other chapters deal with terminology, symbols, colour, typeface, letter size, layout and placement. To help those acquiring signs some information is also given on budgeting and ordering. An extensive bibliography is included.

ESTATE MANAGEMENT

1067. CECIL-WRIGHT, J. J. and ROSS, C. **Estate maintenance condition monitoring.** *Hospital Engineering*, London, 1980, June, vol. 34, no. 5, pp. 18-22.

An effective system for monitoring the maintained condition of buildings and

equipment has been developed and proved by St Helens and Knowsley Area Health Authority in conjunction with management consultants. The system is based on the hypothesis that everything which comprises the structure or contents of a health building should perform the functions for which it was required. If it does not perform these functions it is that factor which is relevant, and not the reason behind it. Arising from this hypothesis the paper considers the facets of function, structure, surface condition, cleanliness and safety; from these the system's requirements are developed. The records needed for the system are: asset register, master survey sheet, survey record sheet, and survey instruction sheets. The system involves three stages: (i) creating a register of assets; (ii) surveying the estate and creating the necessary master survey sheets; and (iii) inspecting the estate to determine maintenance conditions and needs. The implementation and testing of the system is described. Tables of survey times are included.

1068. BATTYE, Cyril. **A dynamic approach to restructuring.** *Health and Social Service Journal*, Basingstoke, 1980, June 27, vol. 90, no. 4699, pp. 840, 841.

The contribution of estate management towards the more economical use of resources and improved standards of patient care has been unrecognized or undervalued within the management structure of the National Health Service. Reasons for this include lack of appropriate information, cost factors, and designation of the estate manager as 'works officer'. The 1974 reorganization emphasized the importance of a new approach to planning, but the system has not so far made full use of estate management. The Centre for Health Services Management at Leicester Polytechnic has carried out a three-year study of the operation of the planning system in practice and developed a computer-based model of a health district in order to simulate and study the effect of planning decisions. The first results have been a statement of the role of the works officer in service planning and the design of a residential seminar to highlight the estate contribution to planning. The development work to promote the estate management contribution to planning may be seen in three stages: (i) to train the appropriate staff using the simulation model; (ii) to design planning tools in association with the model to improve the quality of decisions; and (iii) to expand the application of planning tools so that they become relevant to real life situations.

ENGINEERING SERVICES

INSTALLATIONS IN GENERAL

See also Abstract No. 1062

1069. BUDGE, Ken. **Queen's Medical Centre: engineering services and installations.** *Hospitals and Health Services Purchasing*, London, 1980, Feb., pp. 50, 51.

A large part of the Queen's Medical Centre, Nottingham, is on five floors with horizontal service voids between the ceiling of one storey and the floor of the next. Vertical distribution of services and accommodation of major items of plant is provided within over 20 vertical plant cores, seven of which incorporate groups of lifts and the main ventilation plant. The works area houses the natural gas compound, oil tanks, boiler house, incinerator, and medical gases and compressed air instal-

lations. The boiler house contains five semi-automatic dual fuel boilers and the main alarm panel for the autoscan plant alarm system. Water storage for the site is provided in three textured concrete tanks. Ten pumps provide 250 gallons of water per minute. The electricity supply to the site is 11,000 volts to a number of sub-stations. The main one serves the maternity department and the other 10 are arranged in an inner and outer ring, each serving a different part of the site. Transformers are a mixture of oil cooled and air cooled, with varying capacities.

ENERGY CONSERVATION

See also Abstract No. 1139

1070. ORTH, Günter. Energiekrise und Kosten für elektrische Energie im Krankenhaus. **[Energy crises and electricity costs in the hospital.]** *Krankenhaus-Umschau*, Kulmbach, 1980, June, vol. 49, no. 6, p. 480.

Among the recommendations made in this plea for the conservation of electrical energy in hospitals are the following: in hospitals with more than 400 beds a specialist officer should be appointed to control the consumption of electricity; the consumption of electricity for less important purposes should be timed so that it does not coincide with its use, say, in a central kitchen; time switches for heating, lighting and air-conditioning installations can lead to significant savings; and lighting in continuous use for an average of more than three hours a day is more economical if fluorescent rather than incandescent lamps are used. It is important that administrative and technical staff work out a specific programme so that all technical installations are run economically.

1071. **Keeping energy from going up in smoke.** *Institutions*, Crystal Lake, Ill., 1980, May 1, vol. 86, no. 9, pp. 255, 256.

In the summer of 1978, Columbia Hospital, Milwaukee, Wisc., installed a pyrolytic, contaminate-rated, smoke-free incinerator with a low-pressure steam boiler having a capacity of 4,213 pounds of waste per hour and a potential output of 4,312,000 BTUs per hour. The system, which cost approximately $82,500, incinerates about 6,000 pounds of waste a day, including all dietary wastes (about 20 to 25 per cent of all hospital refuse), all surgical and pathological wastes. The incinerator converts the waste into carbon-rich char (only about three trash cans a day) and gaseous products that are used to produce recoverable heat energy. The heat generated is used to heat hot water, hydrotherapy equipment and a swimming pool. In winter, it also provides space heating for the medical arts building. It is estimated that the system saves about $113,000 a year in refuse disposal charges and fuel costs.

MAINTENANCE OF BUILDINGS AND EQUIPMENT

See also Abstract No. 1067

1072. POPOOLA, R. O. **Planning and execution of preventive maintenance in hospital and industry.** *Hospital Engineering*, London, 1980, June, vol. 34, no. 5, pp. 13-15.

A system of planned maintenance for hospital engineering services is described.

A major objective of the system is to ensure that more than one trade can carry out work within a department simultaneously. No matter to what degree of refinement a preventive maintenance programme is developed, it must contain the basic activities: periodic inspection of plant and equipment to uncover conditions leading to production breakdown and inadequate services; and upkeep of plant to nullify problems, or to adjust or repair problems while they are still in a minor stage. Inspection frequency depends on the age, condition and value of equipment. Inspection schedules should cover routine upkeep, periodic inspection and contingent work. The number of forms and entries should be kept to a minimum. Pointers for refining a programme include: avoid over maintenance; get accurate costs; check inspection frequencies; provide specific craft inspection; adopt repair codes; use modern diagnostic tools; apply industrial engineering techniques; use statistical aids; and design for low-cost maintenance.

EQUIPMENT, FITTINGS, FURNITURE

EQUIPMENT GENERALLY

1073. EIFF, Wilfred von. Die Einbindung medizintechnischer Service-Zentren in die Führungs- und Entscheidungsprozesse im Krankenhaus. **[The integration of centres for medical technology services into hospital management and decision-making processes.]** *Krankenhaus-Umschau*, Kulmbach, 1980, June, vol. 49, no. 6, pp. 460, 462, 464, 468, 470.

Much discussion has been taking place recently within the German health services on the setting up of what are called 'centres for medical technology services' in hospitals. The Federal Ministry for Research and Technology has initiated and financially supported a model experiment which is now on the way to being put into service. The centre should be immediately responsible to the hospital directorate. This paper discusses in detail the duties, competence and responsibilities of this new organizational unit and illustrates them with a number of charts, diagrams and tables.

MEDICAL EQUIPMENT

1074. LÖFSTEDT, Lars and TJERNELD, Nils. Registreringssystem för medicinteknisk utrustning. **[A recording system for medico-technical equipment.]** *Sjukhuset*, Göteborg, 1980, vol. 57, no. 6, pp. 448-451.

It is estimated that the value of the technical medical equipment in a Swedish teaching hospital is over 200 million kroner and that improvements in the recording and control of equipment which would reduce investment in new equipment by a mere 0.2 per cent would save 100,000 kroner annually. This paper describes a system for medical equipment records which divides into three parts (which do however overlap to some extent). The three sections are: an inventory system, an 'incident recording system' (noting faults and the measures taken), and costs records. Specimens of each of these records are reproduced.

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract Nos. 1087, 1129

RECRUITMENT

See also Abstract Nos. 1086, 1181

1075. REEVE, Peter E. **Personality characteristics of a sample of anaesthetists.** *Anaesthesia*, Oxford, 1980, June, vol. 35, no. 6, pp. 559-568.

No published information on the personality characteristics of a significant proportion of any specialty of the medical profession has been available to date. For this study volunteers from one department and at two meetings of the Association of Anaesthetists of Great Britain (171 men and 60 women) were subjected to Cattell's 16 Personality Factor Questionnaire—Form C. The results indicate that the anaesthetists in this sample differ from the general population in a number of dimensions. They are more reserved, intelligent, assertive, serious, conscientious, self-sufficient and tense; they are less socially bold and self-assured. They also differ from a sample of general practitioners. Within the sample of anaesthetists there are six significant differences on a cluster of factors relating to stability. Evidence is quoted, from part of the sample, of a significant relationship between personality profiles and behaviour and performance. The 'good' anaesthetist is seen as a person who likes to be independent, to make his/her own decisions and set and achieve high standards. He/she is calm, co-operative, contemptuous of incompetence, conscientious, stable, reliable, takes life seriously, and likes to see the results of effort quickly. Possible implications for the assessment and selection of applicants for this shortage specialty are discussed.

SALARIES AND SUPERANNUATION

1076. Lønoversigter. **[Salaries and wages.]** *Sygeplejersken*, København, 1980, May 21, vol. 80, no. 20; supplement, pp. 2-24.

This is a series of tables setting out the salaries of Danish nursing staff as at 1 April 1980 according to type of nursing, grade, length of service, and place of work (city, town, rural area etc.). For each salary scale the following figures are given: net annual salary, gross monthly salary; pension contribution; net monthly salary; hourly pay (day time); hourly pay (evening, night); hourly supplement for Sundays and holidays; overtime per hour. The scales for hospital nurses run from scale 15 (for a nursing assistant in her 1st or 2nd year, net monthly salary in Copenhagen 8,189 kroner) to scale 47 (for a chief nursing officer at a Copenhagen hospital with more than 250,000 patient days annually, net monthly salary 14,782 kroner). Details are also given of a number of special allowances and contributions.

STAFF MANAGEMENT

See also Abstract Nos. 1081, 1082, 1088, 1157

1077. CALKIN, Joy D. **Using management literature to enhance new leadership roles.** *Journal of Nursing Administration*, Wakefield, Mass., 1980, April, vol. 10, no. 4, pp. 24-30.

Nursing administrators often recruit nurses to fill new leadership roles while failing to give enough attention to the very organizational factors that would facilitate their effectiveness. This paper suggests that the intelligent application by administrators of models of leadership effectiveness enhances the likelihood of successful leadership behaviour. The discussion includes a review of pertinent management science literature on leadership and suggestions on applying the literature to nursing, with particular reference to its application to new and realigned posts.

1078. KING EDWARD'S HOSPITAL FUND FOR LONDON. **The organisation of hospital clinical work: report of a conference held at the King's Fund Centre on 18th March 1980.** London, King's Fund Centre, 1980. [ii], 30pp. (KFC 80/120)

The purpose of this conference was to discuss the report of the King's Fund Working Party on the Organization of Hospital Clinical Work (KF Project Paper No. 22). The Working Party had concluded that a severe crisis in medical manpower and organization was imminent and recommended principally that medical work should be performed by fully trained doctors. The conference discussed topics including: (i) a proposal to have two grades of consultant; (ii) the introduction of a sub-consultant-grade; (iii) general practitioners carrying out more hospital work; (iv) a smaller number of registrar training posts; (v) supernumery training posts; (vi) the situation for women doctors; and (vii) the economics of the proposals. The dominant views expressed were that: (i) the evolution of the present system is a preferred option but involves problems; (ii) there may need to be a variety of solutions for the different specialties; and (iii) there was no support for a sub-consultant grade.

STAFF TRAINING

See also Abstract Nos. 1052, 1083, 1089, 1090, 1092

1079. DEL BUENO, Dorothy J. and KELLY, Karen J. **How cost-effective is your staff development program?** *Journal of Nursing Administration*, Wakefield, Mass., 1980, April, vol. 10, no. 4, pp. 31-36.

The results from staff development activities cannot be translated easily into monetary terms. Therefore, a cost-effective analysis, which compares descriptive outcomes to costs, is more appropriate than a cost-benefit analysis, which compares financial savings to costs. This paper describes a formula for this purpose which can be used by staff development educators to determine the cost-effectiveness of their activities, and, with modifications, by continuing education providers to determine which of their programmes are more efficient. The three worksheets used to determine the cost-effective ratio are reproduced and their use described. The successful application of the formula at London Memorial Hospital, Leesburg, Va., is described.

STAFF WELFARE

See Abstract Nos. 1137, 1175

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

See also Abstract No. 1094

1080. GERDES, John W. and PRATT, Sidney C. **The role of a medical director in a nursing home.** *Journal of Gerontological Nursing*, Thorofare, N.J., 1980, May, vol. 6, no. 5, pp. 271-274.

Mandatory appointment of medical directors in skilled nursing facilities in the United States has caused problems for physicians and nurses. A project conducted by the Mountain States Health Corporation indicates that the geriatric nurse practitioner/physician team is the key to quality improvement in nursing homes. The project has trained and placed 24 geriatric nurse practitioners (GNPs) on the staff of skilled nursing facilities. Each GNP works with at least one physician to provide services to facility residents. The director of nursing service, the director and administrator of 25 facilities were asked how they saw the role of medical director. Three categories of activity were mentioned most frequently: (i) administrative and supervisory activities; (ii) liaison between practicing physicians and the nursing home; and (iii) provision of direct patient care. Some facilities had a medical director only because of federal requirements; others thought the post unnecessary. Only the administrators mentioned patient care planning. A clearer definition of the role of the medical director is strongly recommended.

MEDICAL STAFF

See Abstract Nos. 1078, 1095, 1151, 1153, 1194

NURSING STAFF

See also Abstract Nos. 1077, 1079, 1109, 1121, 1150, 1175

1081. BUTLER, Elizabeth and HOWARTH, Mary. **A computer system for student nurse allocation during training.** *Nursing Times*, Basingstoke, 1980, July 10, vol. 76, no. 28, pp. 1208-1212.

The senior nurse managers at St Thomas' Hospital, London, approached their department of computing sciences in October 1975 to advise them on the complex matter of the allocation of student nurses to clinical areas. As a result, a nurse allocation system, designed at Addenbrooke's Hospital, Cambridge, was adopted in November 1975. Some initial modifications have been made, and further

enhancements are planned. The system provides: (i) details of training plans; (ii) predicted number of learners available for each specialty each week for up to two years; (iii) a weekly tabulation for up to two years indicating the predicted numbers and seniority of the student and pupil nurses allocated to each specialty and the totals; and (iv) a histogram illustrating the week-by-week variation in the number of nurses allocated to a particular specialty. The technical aspects of the system are described. Details are also given of the enhancements to be included in the second phase of the system and their expected benefits.

1082. LEES, Stanley. **Developing effective institutional managers in the 1980s—Part 2: some new directions.** *Journal of Advanced Nursing*, Oxford, 1980, May, vol. 5, no. 3, pp. 329-339.

This paper examines the fact that (i) the organizational behaviour of nurse managers could be traced to the social defence system learned during early nursing; and (ii) many of the assumptions which underpin much of the current thinking on nurse management training can do little either to help them unlearn these early behaviours or to prepare them to take more innovative action in their respective roles. The initial discussion examines the purpose of management training and what it is intended to achieve, which embraces the issues of the transfer of course learning back to the workplace and the greater involvement of line managers in the development of their staff. By redefining nursing in terms of open-system boundary management, some new directions are suggested which management trainers may find useful in clarifying and redefining their own task, as well as enabling nurse managers to be more innovative and effective within the constraints of their organizational situations. The implications go beyond just nursing and nurse management training. They are concerned with the wider range of institutions whose task is the throughput of people, and which tend to be managed by groups of professionals.

1083. MOULT, Anne P. and others. **Patterns of ward organization.** [Edinburgh, University of Edinburgh Nursing Research Unit], 1978. v, 297pp. bibliogs.

This study was to evaluate the task allocation (team nursing) and patient allocation (primary nursing) methods of working. Although a considerable amount of data was collected there was some difficulty in making a clear distinction between the two methods, which normally overlapped. In the dynamic environment of the hospital the decisions of the ward sister were a crucial factor in allocation of duties, rather than any pre-arranged work pattern. It was found that a majority of nurses had multi-skilled roles and carried out all the range of skills regardless of seniority.

1084. BURRIDGE, C. M. **The implementation of teaching programmes for learners in operating departments.** *NATNews*, Matlock, 1980, June, vol. 17, no. 6, pp. 17, 18, 20-22.

Two main methods were used in a research study to find out how teaching programmes are used in operating departments: (i) a postal questionnaire was sent to nursing officers (theatre) in one regional health authority; and (ii) informal visits to two hospitals outside the region covered by the questionnaire. Sixteen respondents had a teaching programme; 14 did not. The types of teaching programme used are listed. Only four of the respondents had separate programmes for different grades

of learners. The questionnaire also covered: record of teaching made; when teaching takes place; progress assessment method used; availability of seminar or class room in the department; grades of staff involved in teaching; subjects difficult to teach; and suggested improvements for training in theatre. It seems that few of the respondents were satisfied with their own theatre teaching. There is a very definite need for realistic programme planning, guidelines for the trained staff doing the teaching, more planned assessment of learners during allocation, and evaluation of the teaching.

1085. WAHL, Patricia Ryan. **Therapeutic relationships with the elderly.** *Journal of Gerontological Nursing*, Thorofare, N.J., 1980, May, vol. 6, no. 5, pp. 260-266.

Therapeutic relationships with the elderly are unilateral as they focus on the needs of the client and not on the needs of the therapist. Goals for treatment should be established to meet both long-term and short-term needs of the elderly regardless of whether they pertain to physical or emotional problems. The goals are those that the client and therapist have agreed upon as relevant to the client's needs and take into account the social context in which the elderly person functions. Key issues in the relationship are discussed: control; trust and self-disclosure; intimacy; management of the expression of feelings; and tolerance for individual differences. The therapeutic relationship is time-limited—it ends when the goals that were established have been achieved.

1086. KING, B. E. and FLETCHER, M. P. **The work-life of qualified nurses in one metropolitan hospital: a pilot project.** Wellington, New Zealand Department of Health, Management Services and Research Unit, 1980. [iv], 173pp. bibliog. (Special Report No. 57)

Nurses make up a large and costly component of the New Zealand health service, and this report provides information about the characteristics and work patterns of nurses in Wellington Hospital. Some unexpected results were collected; there was, for instance, no firm link between marriage and part-time employment. An unwillingness to undertake further post-basic education was, however, found among married nurses. No less than 18 per cent of nurses had obtained their first nursing qualification overseas, but there were plans to increase recruitment from New Zealand institutions. Although some of the findings are of only local interest the study method and some of the conclusions are applicable elsewhere.

1087. GOLDSTONE, Len. **Choosing the right use for the formula.** *Health and Social Service Journal*, Basingstoke, 1980, June 20, vol. 90, no. 4698, pp. 808-811.

The Aberdeen formula was drawn up in 1963 as a method of defining a standard of nursing care for various dependency categories of patients. It is then possible to compute the number of hours of nursing time per week in a ward as the sum of the basic care times, technical care times and the administrative and domestic time allowances per patient. However, as time spent on certain duties is not wholly related to patient numbers, the use of the formula at ward level is limited, but at a regional level larger numbers could generate the mix of patients needed to apply the formula. Further studies have shown that more accurate measuring of time allocated to different patients is needed to reach a level of staffing relevant to a particular health authority.

In 1978, a successful application of the Aberdeen formula was made in Dyfed by using a more comprehensive approach to standards of care. The usefulness of the formula for daily management is limited because: (i) it deals with average mixes of patients; and (ii) dependency categories are biased heavily towards physical care.

1088. HENNEY, Christina R. and BOSWORTH, Richard N. **A computer-based system for the automatic production of nursing workload data.** *Nursing Times*, Basingstoke, 1980, July 10, vol. 76, no. 28, pp. 1212-1217.

All systems of measuring nursing workload operate by placing patients in dependency categories. This approach has several limitations. The more direct method of associating workload with each procedure is very time-consuming to calculate manually. The installation of a computerized system of nursing care into several wards at Ninewells Teaching Hospital, Dundee, made the use of this direct method feasible. The essential principle of the ward computer system is the selection by the charge nurse of items from a standard pre-coded list of nursing orders, specimen collections, and tests to form a daily care plan for each patient. It is a simple matter to associate a workload rating with each item of care, which, when summed for all the patients in the ward, will give an index of workload for that ward. The operation and application of the system are described and it is compared with a 'dependency grading' system. The system has highlighted the substantial short-term variation in workload which occurs in the wards studied, and in addition has shown that substantial differences exist between long-term mean workload in different wards within the same speciality.

1089. SIMPSON, Ida Harper and others. **From student to nurse: a longitudinal study of socialization.** Cambridge, London, Cambridge University Press, 1979. xiv, 266pp. bibliog. ISBN 0 521 29616 1 £4.25

An American study in 1958 concluded that 'bedside care is no longer the principal occupation of the nurse and the higher the nurse rises in the hospital hierarchy . . . the less does she see of the patient'. To counteract this, teachers of nursing aimed to instill common values centred on patient care. Apart from the curriculum, values are transmitted through group influences, and it is this process of socialization that is studied by the authors. A considerable amount of statistical data from the six-year study is presented, and there is an extensive list of references.

1090. KERGIN, Dorothy J. **The problems of separating education from practice.** *Medical Teacher*, London, 1980, May/June, vol. 2, no. 3, pp. 123-126.

The first part of this paper discusses the organizational separation of nursing education and nursing practice which predominates in Canada, and examines the effects on students, graduates, and teaching and clinical nursing staff. McMaster University, Hamilton, Ontario, has attempted to overcome the negative effects of this separation by the establishment of communication channels, informal sharing of responsibilities, and the funding of joint appointments. The nursing profession in Canada cannot enhance its ability to meet present and future needs for competent

nursing staff unless those who provide care and those who teach work together and share their combined resources.

1091. WATKIN, Annette M. **The organisation of nursing services.** Manchester, University of Manchester, Department of Social Administration, Health Services Management Unit, 1980. [i], 30pp. (Working Paper No. 26) £2.00

The author suggests that, whilst the medical profession should not be taken as the model for nursing, there should be well-paid posts for clinical nurse specialists. The changing scope of nursing in England and Wales is described, with reference to the Briggs Committee on Nursing (1972), the Salmon Committee on Senior Nursing Staff Structure (1966) and the Working Party on Management Structure in the Local Authority Nursing Services (1969). Other matters considered are the shortage of nurses, pay and conditions.

OTHER PROFESSIONAL AND TECHNICAL STAFF

1092. WESTBERG, Jane and others. **Teaching interpersonal skills in physician assistant programmes.** *Medical Teacher*, London, 1980, May/June, vol. 2, no. 3, pp. 136-141.

Increasing awareness that the technical competence of health professionals must be complemented by a well developed set of inter-personal skills (IPS) has resulted in the rapid growth of the formal teaching of IPS in training programmes for an important group of new health professionals in the United States—physician assistants (PAs). This is a report of a national survey which was part of a study designed to determine the extent and characteristics of IPS teaching. Most PA programmes have a specific course or a section of a large course for the teaching of IPS. Psychologists, physician assistants and psychiatrists serve as teachers for most of these programmes. The majority of programmes teach process, information-gathering and psychological intervention skills. Less than half provide instruction in one-to-one patient education, team membership skills, sexual and family counselling and self-care for health professionals. Most of the programmes use videotechnology.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 1083, 1091, 1164, 1190, 1191, 1198

1093. POOL, J. J. and VISSER, A. P. Ziekenhuisorganisatie en het welbevinden van patiënten. **[Hospital organization and the well-being of the patient.]** *Ziekenhuis*, Utrecht, 1980, May 7, vol. 10, no. 9, pp. 274-277.

The paper discusses a research project to be carried out in general hospitals with the aim of improving psycho-social care for patients in ward units with the emphasis on improving the therapeutic climate. Data provided by the hospitals will largely determine the course of the project and new proposals will not receive any financial support. The work will start in early 1981 and preparatory work will be carried out

during 1980. The investigation will consider the most urgent problems on the wards, problems in achieving optimal patient care, the criteria for quality of care, necessary change in patient care, and the interest shown in the departments for such changes. The paper contains a variety of brief references on research in these fields in the Netherlands with particular mention of the Free University. It concludes that many findings will pose new problems. It is hoped that the project will have both practical and scientific value and that this article will encourage hospitals to participate. The paper includes a list of references.

GOVERNING BODIES, COMMITTEES

1094. LONGEST, Beaufort B. **Trustees and administrator: a plan for sharing responsibility.** *Hospital Forum*, San Francisco, Calif., 1980, April/May, vol. 23, no. 3, pp. 8, 9, 11, 15.

The author discusses the relationship between the board of trustees and the administrator in United States hospitals. The board and the administrator have to decide how the hospital can meet the needs of its environment. Once objectives have been decided upon, policy decisions should be taken and the hospital's organizational structure established. The board and the administrator together are responsible for: (i) the day to day management of the hospital; (ii) evaluating the hospital's activities; and (iii) providing for change when objectives are not being achieved. The effective management of the hospital depends upon the board and the administrator having a clear understanding of each other's responsibilities. The responsibilities of the board include decisions prescribed by law, decisions involving the budget and decisions involving major development plans, while the administrator is primarily responsible for organization design and implementation of policies. However, many areas need careful discussions between board and administration. An evaluation of the performance of the administrator should be carried out by the board and that of the board by an outside consultant.

1095. BLANTON, Wyndham B. **Physician's role in hospital continues to grow.** *Hospital Medical Staff*, Chicago, Ill., 1980, April, vol. 9, no. 4, pp. 13-21.

The United States literature of 1979 is examined in search of the trends of that year, many of which will surely be carried into the 1980s. Among the topics covered are: the interplay among physicians, trustees and administrators; medical staff relations with nurses and other physicians; hospital privileges; hospital and medical staff liability; quality assurance; and cost control. A list of 75 references to the literature is included.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 1124, 1157, 1162

1096. BROWN, Montague and MCCOOL, Barbara P., editors. **Multihospital systems: strategies for organization and management.** Germantown, Md., London, Aspen Systems Corporation, 1980. xv, 565pp. ISBN 0 89443 169 2 £19.50

A wide range of co-operative schemes exist for hospitals, ranging from the simple sharing of laundries to complete corporate consolidation. Most arrangements include

an overlay of managerial expertise and, increasingly, medical programme sharing. Multihospital systems in the United States are seen as a means of spreading fluctuations in demand and strengthening organizations to meet changes. For patients there is improved quality, range and availability of care. The journal articles reprinted in this volume are divided into four sections, each of which has an introduction The sections are: (i) the environment of multihospital systems; (ii) structure and organization; (iii) effectiveness; and (iv) future prospects.

1097. BAYS, Carson W. **Prospective payment and hospital efficiency.** *Quarterly Review of Economics and Business*, Urbana, Ill., 1980, vol. 20, no. 1, pp. 76-86.

The manner in which hospitals are paid for their services has important effects, upon their incentive structure. Much recent attention has been focused on prospective payment schemes. This paper considers the effects on hospitals of prospective payment when an explicit capital margin is part of the payment formula. With quality constant, the hospital has an incentive to exceed least-cost because it will use a factor ratio which is excessively labour-intensive for each output level. If quality is allowed to vary, the hospital will still not produce at least-cost, but the direction of the factor-intensive bias is indeterminate. Solving these problems by increasing the degree of regulation is unlikely. Empirical testing would be necessary to determine the quantitative significance of these predictions. It may be that the inefficiencies of the reimbursement systems have been so gross that prospective payment will be a superior alternative, however imperfect. But these results suggest that the initial assessment of the efficiency aspects of prospective payment plans may have been too optimistic; they may support the old inefficiencies with new ones.

1098. EUROPEAN ECONOMIC COMMUNITY. HOSPITAL COMMITTEE. **Methods of cost containment in hospitals.** Heverlee (Belgium), Hospital Committee of the European Economic Community, 1978. 86pp.

This paper attempts to crystallize the discussions which have taken place within the Costs and Statistics Sub-Committee of the Hospital Committee for the European Communities. Chapters include discussions of hospital cost containment in Great Britain, France, Belgium, West Germany, Luxembourg, Denmark and the Netherlands. All members emphasized that: (i) if costs were to be contained it should be the volume of service which is reduced not the quality; and (ii) the crucial role of the government in such areas as financial control and the introduction of necessary legislation should be fully recognized.

RUNNING COSTS

1099. AERT, J. H. van and others. **Cost structure of general hospitals in the Netherlands.** Utrecht, Nationaal Ziekenhuisinstituut, 1977. 20pp. (ST 77/087)

This is a summary of an investigation into the differences in costs from one hospital to another in the Netherlands. The objectives of the study were as follows: (i) to develop cost models to compare and evaluate the inter-hospital cost variation; (ii) to establish the extent to which hospital function and capacity affect costs; and (iii) to investigate the impact of capacity utilization and a number of other variables on costs. The article describes the methods used in the study as well as results obtained.

BED OCCUPANCY, ECONOMIC USE OF BEDS

1100. HANUS, James. **Two rural hospitals' projects apply swing bed concept successfully.** *Hospital Progress*, St. Louis, Mo., 1980, May, vol. 61, no. 5, pp. 63-65, 77.

The 1965 changes in Medicare and Medicaid increased the difficulties already faced by rural hospitals in the United States by curtailing their flexibility to provide long-stay beds. Two federally sponsored experimental programmes to overcome these problems are reported. The Utah Cost Improvement Program (UCIP), which started in 1973, enables rural hospitals fulfilling certain conditions to use continuously or intermittently empty, costly, acute care beds for long-stay patients, charging a lower rate commensurate with the level of services provided. The scheme has benefited both patients and hospitals. The Reducing Acute Care Costs experiment began in July 1975 in Texas, South Dakota and western Iowa and was patterned after UCIP. Though 15 of the original 63 hospitals withdrew in the implementation stage, the 20 Iowa hospitals in the scheme realized savings of $132,500 in overall operating costs and projected a $446,350 increase in revenues. Alternating beds between acute and long-stay care seems to offer an opportunity to save rural hospitals from unnecessary closure and alter the balance of services to meet demand on a national scale.

1101. MACGREGOR, R. B. K. and SJÖLUND, S. **Why does Stockholm have eight times as many hospital beds for the elderly as Bristol?** *World Hospitals*, London, 1980, May, vol. 16, no. 2, pp. 11-14.

At a meeting in Leeds in 1978 of the international project for health care planning in urban areas, it was decided to make a comparison between the provision of health services to the elderly in Stockholm and Bristol. The two cities outlined their resources and picked out those used for in-patient care. Stockholm uses many more beds for long stay geriatric care than Bristol and reasons for this were sought. The numbers of elderly needing long stay care and the provision of alternatives, such as sheltered housing, were broadly similar in both cities. There were differences, however, in medical organizations. In Bristol, the majority of elderly sick suffering from both acute and chronic medical conditions are treated by the geriatric service, while in Stockholm all patients are admitted to long stay hospitals via acute hospitals and may have to wait two or three weeks for suitable care. Bristol's primary medical care services, including voluntary services, outweigh those of Stockholm, where home resources are scarce. Comparisons were difficult to draw owing to differences in organization and concepts between the two cities, but each learned from their alternative approaches to practical problems.

1102. KAO, Edward P. C. and TUNG, Grace G. **Forecasting demands for inpatient services in a large public health care delivery system.** *Socio-Economic Planning Sciences*, Oxford, 1980, vol. 14, pp. 97-106.

There are two basically different approaches in forecasting demand for inpatient services: time-series models; and econometric. The latter generally has a better chance

of producing forecasts of higher quality, but requires a larger information set and more elaborate statistical treatment. For routine applications in an institutional setting simplicity is needed and the time-series approach seems to be more attractive. This paper explores the use of auto-regressive integrated moving average (ARIMA) time-series models in a large public health service system. Demands are measured in terms of monthly admissions and patient days by services, and forecasts are made yearly. The paper emphasizes the implementation aspect of ARIMA models when they are used on a large scale in an institutional setting, and compares forecasts with actual demand. Finally the use of the forecasts in the context of resource allocation is described briefly.

APPOINTMENT SYSTEMS, WAITING LISTS

See Abstract No. 1059

OFFICE MANAGEMENT AND METHODS

1103. McLAUGHLIN, Daniel B., SHAPIRO, Fred L. and UMEN, Andrew J. **Designing information systems for health care executives.** *Health Care Management Review*, Germantown, Md., 1980, vol. 5, no. 2, pp. 49-57.

Because of the complexity of today's health care systems, the quantity of data generated within health care organizations has increased significantly. Some part of this data is useful, perhaps even critical, but most of it is not usable in management. One method of identifying the data needed for management is the selection of critical success factors (CSFs). The system is based on the fact that only a few critical factors separate the successful from the unsuccessful. The application of the system in the Regional Kidney Disease Program at Hennepin County Medical Center, Minnesota is described. The four CSFs used are: (i) encouraging patient referrals; (ii) maintaining or increasing the quality of patient care; (iii) keeping a tight control on the unit cost of dialysis; and (iv) maintaining an appropriate mix of patients in all modalities of the care of end-stage renal disease.

1104. OLSEN, T. Medisinsk kontortjeneste: et organisasjonsutviklingsprosjekt ved Regionsykehuset i Tromsø. **[Hospital office work: an organizational development project at the Tromsø Hospital.]** *Norsk Sykehustidende*, Oslo, 1980, vol. 53, no. 1/2, pp. 26, 28, 30.

An investigation was conducted into the detailed organization of hospital office functions: aims were formulated for the medical office service; possible rationalization measures were assessed, including all current forms; and the question of the use of medical secretaries under training was discussed. The project was conducted in two phases: (i) a report on all tasks performed by ward clerical staff; and (ii) a working environment study of the medical office service, conducted by the Norwegian Hospital Research Institute (NIS). The second phase resulted in the publication of five reports on: (i) organizational structure; (ii) the working environment study referred to above; (iii) postal clerk systems; (iv) computerized systems; and (v) conclusions. The aim of the entire project was that the formal structure of working parties and project groups should be dissolved. The task of administering and researching into the medical

clerical service was transferred from the project leader to the financial consultant. Responsibility for clerical organization must be placed clearly in the hands of a competent person from central administration or a head of department, and full confidence must be extended in both directions; up and down in the hierarchy and between medical and administrative staff.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 1074, 1081, 1088, 1110, 1170, 1171

1105. ROYAL COLLEGE OF RADIOLOGISTS. WORKING PARTY ON C.T. SCANNING. **Report.** (Convenor: Dr. F. G. M. Ross). [London], Royal College of Radiologists, 1979. [ii], 14pp. £1.00

This report is primarily concerned with the role of the general purpose computerized tomography scanner for body scanning, with particular reference to its siting and the financial and logistic consequences. Likely effects on clinical management and service to the community are also considered. The report recommends that new scanners should be the whole-body type except for a few special cases such as Neuroscience Centres. Supervision by a diagnostic radiologist is suggested but use in radiotherapy and oncology is emphasized. Provision of one scanner per 500,000 population is thought to be about right for Britain but this will require more staff and much more expenditure.

1106. KIMURA, Tokuzo. **Real-time prescription in total information system at the Metropolitan Hospital.** *Australian Journal of Hospital Pharmacy*, Heidelberg, Vic., 1980, March, vol. 10, no. 1, pp. 11-14.

The first trial in Japan of a computerized prescription ordering system began in October 1975 in the out-patient department at the Metropolitan Hospital, Tokyo. It is based on a Hitac 8450 computer. On-line video terminals are operated by the physicians to enter exact prescription data and transmit them to the pharmacy, where prescriptions are filled and patients' bills prepared simultaneously. The system enables 60 per cent of patients to receive their drugs immediately they arrive at the pharmacy counter; another 30 per cent receive them within nine minutes.

1107. HUGHES, Shirley J. **Installing a computer-based patient information system.** *Journal of Nursing Administration*, Wakefield, Mass., 1980, May, vol. 10, no. 5, pp. 7-10.

The potential for an automated system for improving patient information handling and generating captive data for research and audit are tremendous. There are many approaches to implementation of such a system, but success will depend on strong leadership and the participation of every hospital department. The method followed at Nebraska Methodist Hospital, Omaha, is described. The system was installed on the hospital's own computer, the vendor providing initial training and additional support as required. Members of each hospital department selected a project co-ordinator; some departments formed committees to assist the co-ordinator. A 25-person users' committee and a doctors' data processing committee were formed to co-ordinate individual

departmental efforts. The admitting system was the first to be implemented, followed by all ancillary departments, then the nursing units one at a time. Some problems in the implementation and benefits of the information system are outlined.

LIBRARIES

1108. SCHNEEMANN, R., STEUDTNER, C. and SWERTZ, P. HECLINET—Internationale Fachdokumentation für das Krankenhauswesen. **[HECLINET: international documentation for hospital services.]** *Krankenhaus-Umschau*, Kulmbach, 1980, May, vol. 49, no. 5, pp. 344, 346, 348, 352.

HECLINET (Health Care Literature Information Network) is an international system for recording, collating and disseminating world literature on all aspects of hospitals and their administration. Hospital institutes in Germany, Sweden, Denmark, Poland, Austria and Switzerland participate and literature recorded in the United States is also made available. At the end of 1978 some 35,000 documents had been recorded on tape and 4,000 to 5,000 new titles are added annually. About 70 per cent of the titles are periodical articles taken from 386 specialist journals which are scanned regularly: the remaining titles are of books, pamphlets, prospectuses, etc. Each collaborating organization supplies its own national literature references and in return receives a copy of the full tapes and is able to supply (in microfilm or photocopy) copies of any document requested. 80 per cent of recorded documents can be supplied on microfilm. Each centre supplies references and documents in response to enquiries in its own country.

1109. BOND, Senga. **Sources and resources.** *Nursing Times*, London, 1980, June 19, vol. 76, no. 25, pp. 1106-1109.

One indicator of the importance attached by health authorities to continuing nurse education is the quality of its library provision. The availability of library services for nurses is unevenly distributed across Britain. A vigorous attempt is now being made in the northern region to remedy the deficiency there. Achievements include: (i) making the resources of the Newcastle-upon-Tyne University Library available to nurses; (ii) a movement towards the creation of multidisciplinary library facilities; and (iii) development of stock of nursing books at Newcastle-upon-Tyne Polytechnic where nursing courses are held and its incorporation into a nurses' library scheme.

MEDICAL RECORDS

See also Abstract Nos. 1103, 1107, 1170, 1199

1110. GROVES, William E. and DAVIDSON, W. ROSS. **A computerized chart management system for medical records.** *Computer Programs in Biomedicine*, Amsterdam, 1980, April, vol. 11, no. 2, pp. 158-164.

Patients seen at the Medical University, Charleston, S.C., are referred from throughout the state. It is important therefore that the specialist at the hospital stays in contact with the referring physician for optimal patient care. The medical records

department assists in this through an eight-step computerized chart management system. The system is based on a CDC model 1784 computer and three CDC model 270-10 disk drives and uses CDC Fortran IV. The total software is comprised of 22 programs, two sub-routines and four data files: the total disk storage space required is 1413 kilobytes. The reports generated include outstanding records sorted by department/physician and outstanding records with charges pending.

1111. LEITGEB, Helmut. Laborautomation durch EDV. **[Laboratory automation and electronic data processing.]** *Krankenhaus-Umschau*, Kulmbach, 1980, May, vol. 49, no. 5, pp. 340, 342.

The comprehensive electronic data processing system for laboratory data in use at the Salzburg Provincial Hospital is described and details are given of the work flow for analysis for both in-patients and out-patients. The process computer used is an IBM 5/7 with a Longines reader and adequate printers. This computer is associated with the Provincial Computer Centre (an IBM 370/184). After one year's routine use it has been demonstrated that there has been considerable reduction in work for nurses, doctors and the messenger service, and less administrative work in the laboratory. The staff of the central laboratory (handling 950,000 individual analyses for 37,000 in-patients and 9,000 out-patients in a 1,600-bed hospital) is: three doctors, two chemists, 15 technicians, two laboratory assistants and a clerk.

1112. PALMER, R. N. **Consent, confidentiality, disclosure of medical records in the course of litigation.** London, Medical Protection Society, 1980. 21pp.

This booklet deals with the ethical and legal questions relating to consent to medical procedures and confidentiality of medical records in the United Kingdom. Topics dealt with in the section on consent include contraception, clinical trials, and the case of Jehovah's Witnesses. The section on confidentiality sets out the circumstances under which records may be disclosed—for court orders or research, for instance.

HOSPITAL STATISTICS

See Abstract Nos. 1053, 1155

LEGAL AND ETHICAL ASPECTS OF HOSPITAL ADMINISTRATION

See also Abstract Nos. 1112, 1183, 1187-1189

1113. RHOADS, Jonathan E. **The right to die and the chance to live.** *Journal of Medical Ethics*, London, 1980, June, vol. 6, no. 2, pp. 53, 54.

This introductory paper to a symposium on ethical and moral issues in surgery and surgical research examines the dilemma of the doctor who tries everything he can to prolong the life of a patient but to no avail. The author questions whether or not leaving well alone might in some circumstances have been better. However,

he concludes by suggesting that those who are 'put through without success' are paying a necessary price on behalf of those, still a minority, for whom success is achieved.

1114. GIERTZ, Gustav. **Ethics of randomised clinical trials.** *Journal of Medical Ethics*, London, 1980, June, vol. 6, no. 2, pp. 55-57.

There are no generally accepted ethical guidelines for controlled clinical trials; the issue is hardly discussed in the Helsinki Declaration even in its last version. As chairman of the Commission on Medical Ethics of the Swedish Society of Medical Sciences, the author has carried out two studies: an examination and compilation of more than 700 papers from all fields of medicine reported in the summary book from the annual general meeting of the Society; and a follow-up of all the projects assessed by the ethical committees in Sweden up to and including 1974. These studies are summarized and on the basis of them, he discusses the principles of controlled trials and their potential for objective assessment of the advantages and disadvantages of new drugs or other clinical methods. He points out that trials in which another method is compared with placebo or inaction, while potentially yielding valuable information, may also give rise to moral objections.

1115. KIRBY, M. D. **The rights of the living and the rights of the dying.** *Medical Journal of Australia*, Glebe, N.S.W., 1980, March 22, vol. 67, no. 6, pp. 252-255.

In this paper the Chairman of the Australian Law Reform Commission discusses the reference received by the Commission for the review of Australian laws on privacy protection, with particular reference to privacy and medical records. Also discussed are the legal and ethical issues of clinical trials and of euthanasia.

1116. YEZZI, Ronald. **Medical ethics: thinking about unavoidable questions.** New York, London, Holt, Rinehart & Winston, 1980. xiii, 238pp. bibliogs. ISBN 0 03 053256 6 £4.55

The general background of medical ethics is presented with little use of technical or philosophical language. Particular problems are then discussed in chapters on abortion, sterilization, genetic control, allocation of scarce resources, death and dying, human experimentation, behavioural control, patient relationships and health-care delivery. Each chapter dealing with a specific problem begins with a brief presentation of relevant data and terminology, and at the end bibliographical references are provided.

OTHER SPECIAL ASPECTS

1117. MCCLURE, Walter and KLIGMAN, Lenore. **Conversion and other policy options to reduce excess hospital capacity.** [Hyattsville, Md.], Bureau of Health Planning (available from National Technical Information Service), 1979. v, 126 pp. (Health Planning Information Series 16; HRP 0201601; DHEW Publication No. (HRA) 79-14044)

This American study considers methods of reducing hospital bed provision. The particular aspects explored are: (i) alternative uses for facilities taken out of service;

(ii) the degree to which social, political, professional, legal and financial objections to a reduction can be overcome; and (iii) the role played by outside parties (government, citizens' groups, business) in the retirement or conversion of excess hospital capacity. A large number of conclusions and recommendations are presented, and in particular the 'swing bed' method of partial conversion (see *Hospital Abstracts*, vol. 19, no. 1134) is rejected.

1118. EVAN, William M. and KLEMM, R. Christopher. **Inter-organizational relations among hospitals: a strategy, structure, and performance model.** *Human Relations*, New York, 1980, May, vol. 33, no. 5, pp. 315-337.

Contrasting theories of organization-environment relationships are used to consider current trends in relations among health care organizations in the United States. Chandler's well-known thesis is used to bridge the contrasting theories; its revision and extension results in a recursive model of strategy, structure, and performance. Interviews, documents and administratively collected data were examined to determine the extent to which strategy, structure, and performance are linked in four different types of multihospital systems: consortium; joint venture; merger; and corporate management system. Using Kendall's measure of concordance, strategy and structure are found to be closely related. While the relationship of strategy and structure is not one-to-one as in individual organizations considered by Chandler, the significant association found between one measure of strategy, structure and performance indicates that the multihospital systems examined are able to link their strategy and structure effectively to performance. By systematically exploring the interrelationship of strategy, structure and performance in a variety of organizational contexts, organizational researchers will very likely increase their understanding of how organizations are interrelated with their environments.

FINANCE AND ACCOUNTING

FINANCE

See also Abstract No. 1169

1119. VRACIU, Robert A. **Decision models for capital investment and financing decisions in hospitals.** *Health Services Research*, Chicago, Ill., 1980, vol. 15, no. 1, pp. 35-52.

The literature on capital investment and financing decisions for hospitals has suggested several approaches to analyzing sets of options. These approaches are categorized in three groups: cost models; net cost models; and net present value models. This paper presents a taxonomy of these models, analyzes and compares the different elements of the taxonomy, and illustrates and discusses the information that can be gained by using each approach. These different analytical methods are viewed as complementary rather than competing methods of providing information to decision-makers, and it is argued that the complex nature of hospital objectives demands the use of more than one approach. Failure to do this may lead to biased evaluations and poor decision-making.

COSTS

See also Abstract Nos. 1056, 1097, 1098, 1166

1120. LAMONT, Gwynn X. **The cost containment—quality of care issue.** *Hospital Topics*, Sarasota, Fla., 1980, May/June, vol. 58, no. 3, pp. 6-10.

Continual emphasis on health care cost containment has reopened the issue of the relationship between cost containment and quality of care, and has created a need to understand the basic composition and nature of that relationship. Quality of care is seen as consisting of an ever-changing network of components that are dependent upon one another. As one component changes, so do others until, in the end, the whole network has undergone a transformation; in effect, following the chain reaction principle. Cost containment is one of those components. It has been receiving such widespread attention and emphasis that imbalance in the network occurs, posing a serious threat of deterioration in the quality of care. Yet significant cost containment benefits can be obtained while improving the quality of care if the approach to cost containment is one where cost is considered along with other factors before deciding to fund an undertaking or, in other words, where cost containment is one of the by-products of, rather than the sole reason for, a change.

1121. CLAUSEN, Inge Sundtoft. Efter en uges ophold på et fransk hospital midt i en sparetid: vort hospitalsforbrug er gigantisk i forhold til det Franske. [**A week's work in a French hospital during a period of economy shows that our hospital costs are gigantic in comparison to French hospitals.**] *Sygeplejersken*, København, 1980, June 18, vol. 80, no. 24, pp. 8-10.

A first-year Danish student nurse, who spent a week in a hospital in North East France in December 1979 describes some of the economies introduced in French hospitals in September of that year. The paper is mainly concerned with the return to re-usable articles in place of disposables; the use of re-usable glass instead of plastic drainage flasks; and the fact that sterile gloves are not worn in France, as they are in Denmark, when changing dressings.

1122. JONG, L. P. de. Enige aspecten van de problematiek rondom tarieven en richtlijen. [**Some aspects of costs and management problems.**] *Ziekenhuis*, Utrecht, 1979, Dec. 5, vol. 9, no. 23, pp. 612-617.

The continuous expansion of the health services makes it necessary to examine the function of tariffs in private hospitals and their staff establishment. A reduction in the number of bed-days may be of economic significance, as well as the pruning of excess bed capacity. There is also a tendency towards replacing in-patient care with out-patient treatment. As regards function, several questions arise. Do tariff and/or establishment affect the volume of production? Does a given tariff and/or establishment hinder the attainment of the greatest possible financial return? The regulating effect of price on supply and demand has been deliberately eliminated, and has been replaced by the tariff rates and establishment laid down by Parliament. The all-in tariff and the all-out tariff both have advantages and disadvantages, but a form of tariff must be sought which rests primarily on a service-giving basis and approaches the actual average production cost as closely as possible.

1123. SIEMIATYCKI, Jack, RICHARDSON, Lesley and PLESS, Ivan Barry. **Equality in medical care under national health insurance in Montreal.** *New England Journal of Medicine*, Boston, Mass., 1980, July 3, vol. 303, no. 1, pp. 10-15.

In November 1974, four years after national health insurance in Canada had eliminated all out-of-pocket payment for physicians' services, the authors carried out a survey of 1,559 households in a socially heterogeneous area of Montreal to assess social class differences in the use of physicians' services. When reported health status as well as age and sex were taken into account, the rates of physician visits during the two-weekly period preceding the survey were essentially the same in the low, middle and high economic classes, thus confirming that disparity of access had been reduced. However, relative to other groups, the poor still made considerable use of hospital clinics and emergency rooms for primary care, and more of their visits entailed prescriptions and physician-initiated requests to return. The latter observations may indicate that the poor, as compared with other groups, consulted the doctor for more advanced conditions. Official statistics showed no increase in the workload of the average physician, although the number of physician visits per person per year had risen steadily. There was no evidence of abuse of 'free' medical care by the poor.

HOSPITAL ACCOUNTING

1124. TOUGAS, Christiane. Comment obtenir une bonne performance avec les outils actuels de gestion budgétaire. **[How to obtain an efficient performance with existing accounting techniques.]** *Administration Hospitalière et Sociale*, Montreal, 1980, March/April, vol. 26, no. 2, pp. 16, 18, 19.

The tools which are currently available for monitoring performance in a hospital dietetics department in terms of the budget are: (i) a comparison of expenditure with that in the previous year; and (ii) comparisons with similar hospitals. Labour accounts for 66 per cent of total expenditure and food for 31 per cent. In a crisis the first reaction is to reduce the quantity or quality of the food, but the savings which can be achieved in this way are marginal. It is not easy to reduce staffing levels and inflation usually accounts for most 'overspending' in the department's budget. The author suggests that some saving can be achieved by monitoring purchases, minimizing losses, standardizing portions and recipes, and also by means of more effective staff training.

SUPPLIES AND STORES

SUPPLIES

1125. CHAMBERLAIN, Mansel. **Looking to supplies in the eighties.** *Hospital and Health Services Purchasing*, London, 1980, May, pp. 144, 146, 147.

This paper examines six main areas in which action is necessary to improve supplies organization in the National Health Service. Though they are treated separately they do overlap and intertwine inextricably. The six areas are: (i) education and training,

which must be further improved and cover a wider range of skills; (ii) computing, which should provide the information necessary for improved efficiency; (iii) commercial awareness and expertise, so that the service can develop its own specifications; (iv) intelligence gathering, which must be improved to cope with the sheer range of commodities purchased; (v) inventory management, which should lead to stock reduction; and (vi) integration with other disciplines through a more professional supplies organization.

PURCHASING

1126. RAO, C. P. and KISER, G. E. **Attributes of hospital suppliers that influence hospital buyers.** *Hospital Topics*, Sarasota, Fla., 1980, May/June, vol. 58, no. 3, pp. 12-18.

Hospital purchasing executives have primary responsibility for identifying, selecting, evaluating and retaining the sources of supply. This paper is concerned with the effect on their decisions of their views of the attributes of vendors. Two buying situations were simulated, involving standard and special products. An exhaustive list of vendor characteristics was compiled and arranged in six broad categories: convenience-related; economic-financial; calibre-capability; image-dependability; intercorporate relations; and service-related. The attributes were arranged in a questionnaire which was sent to the 815 members of the American Society for Hospital Purchasing Agents; 244 usable replies were received. They were asked to rate the attributes using a scale of weights from one to seven. The results are given in three tables. The major findings are: (i) certain basic vendor attributes are important to hospital buyers in the purchase of both standard and special products; (ii) the relative importance of many vendor attributes as perceived by hospital buyers is highly specific to the buying situation; and (iii) aggregate attribute category analyses revealed significant contrasts between the buying situations.

1127. BULE, Arthur. **A measure of supply.** *Hospital and Health Services Purchasing*, London, 1980, May, pp. 153,154.

One important spin-off of the availability of more supplies management information could be the development of a vendor (or supplier) rating system. Vendor rating can be defined as a technique to evaluate objectively a supplier's performance and is based upon carefully selected criteria. The scheme should consist of three elements: (i) quality—the level of consistency achieved in terms of the product compared with the defined level of need; (ii) service—the fulfilment of delivery promises; and (iii) price—the consistency of a fair price for the quality provided. A weighting factor is applied to these elements according to the individual buyer's assessment of their priority for each product. A standard is then set against which the weighted elements can be judged. A table illustrates the use of the rating system.

STORES

1128. FREIMARK, Peter. Methoden der Güterverteilung. **[Goods distribution methods.]** *Krankenhaus-Umschau*, Kulmbach, 1980, June, vol. 49, no. 6, pp. 472-474, 476.

This paper is concerned with the distribution of goods in the hospital and their

storage until use in appropriate sub-centres. This involves the ordering of goods from individual departments (including the maintenance of records), staffing requirements, transport (horizontal and vertical), delivery to sub-centres, local storage, and final handing over at the point of use. The paper is illustrated with a number of diagrams.

CATERING, DIETETICS, KITCHENS

See also Abstract No. 1124

DIETETICS IN THE HOSPITAL

1129. GORMICAN, Annette. **Clinical dietetic staffing practices in 138 short-term acute care hospitals.** *Hospital Topics*, Sarasota, Fla., 1980, May/June, vol. 58, no. 3, pp. 38-43.

In order to obtain a profile of clinical dietetic staffing practices, a survey questionnaire was sent to a representative sample consisting of 235 acute general hospitals with an in-patient capacity of 266 to 1,884 beds. Of the 235 questionnaires, 140 (60 per cent) were returned, but two were eliminated because information was incomplete. The principal purpose of the questionnaire (which is reproduced) was to collect information on the types and numbers of modified diets, and to relate it to dietitian, technician, assistant and clerical staff employment practices. The results are summarized in four tables and discussed. They suggest that employment practices for clinical dietitians and dietetic technicians vary considerably throughout the United States. Although there is a relationship between the number of clinical dietitians employed and the in-patient census, the percentage of modified diets being served seems to have little bearing on staffing levels. No attempt was made to evaluate the quality of nutrition services.

FOOD SERVICE

1130. PEAKE, Stephen. **Queen's Medical Centre: meal service for patients.** *Hospital and Health Services Purchasing*, London, 1980, Feb., pp. 46, 47.

The Queen's Medical Centre, Nottingham, has installed the first large-scale insulated food system in a British hospital in an attempt to provide patients with food of the same standard as that achieved in the kitchens. The Temp-Rite system means that all courses of a meal are served on individual trays which, when stacked in piles of six to eight and covered by an insulating cover, are protected against outside air. The system has the following advantages: (i) hot foods stay hot and cold foods remain chilled for any length of time; (ii) the nutritional value and appearance of the food does not deteriorate; (iii) heated trolleys to transport the food are not needed; (iv) there is no washing up; and (v) risk of cross-infection is avoided. The trays and covers are machine washed and sterilized and replaced by the manufacturers when necessary. Patients are provided with a wide menu choice based on a 28-day cycle. Portions are served on to the trays from heated service stations situated on either side of a conveyor belt. Catering and ward staff are taught

how to handle the trays correctly and the system has been praised by staff and patients alike.

HYGIENE IN THE HOSPITAL

1131. MEESTER, H. H. M. and HORST-BRUIJN, J. J. G. van der. Ziekenhuishygiëne is voor berbetering vatbaar. **[Hospital hygiene improvement required.]** *Ziekenhuis*, Utrecht, 1980, Jan. 23, vol. 20, no. 2, pp. 54-56.

The hospital hygiene service is only a decade old, but during that time its conditions of work have changed. The main problem used to be staphylococci and streptococci; now it is often bacteria from the patients which play a part in the occurrence of infection and cross-infection. These bacteria are increasingly insensitive to most antibacterial agents. Hospital infection committees are now established at most hospitals, and the concept of the hospital hygiene officer has been introduced. Her task is, however, often ill-defined. Since 1977, one hygiene officer has had to be employed per 255 hospital beds, but many managements did not know exactly what this officer was supposed to do or even what professional background she should have. A course for hospital hygienists was established in Breda in 1977, and a commission was set up in 1979 to consider specific professional training. At present one or two hygienists are employed at most hospitals, where they take samples, check sterilization and disinfection, and investigate foci of infection. Lack of clearly defined authority, and especially of equipped laboratories, makes independent investigation and prevention of infection impossible. Lack of information is also a problem. For the hospital hygiene service to work, it should consist of a bacteriologist-epidemiologist, hygienists with different backgrounds, one or more analysts, and administrative personnel. Since the hygiene service is related to financial, technical, social and staff factors, it is necessary for it to have regular meetings with the hospital management.

PREVENTION AND CONTROL

1132. GARDNER, Pierce and others. **Nosocomial management of resistant gram-negative bacilli.** *Journal of Infectious Diseases*, Chicago, Ill., 1980, March, vol. 141, no. 3, pp. 415-417.

The resourcefulness of bacterial pathogens in developing resistance to antimicrobial drugs makes it more important than ever to determine mechanisms of transmission of resident organisms and/or resistance determinants in the hospital and to identify the selective pressures that enhance the emergence and survival of resistant strains. Control of hospital acquired infections begins with the re-emphasis of the basic lessons of Semmelweiss and Lister regarding handwashing and hygiene by medical staff. Additional approaches have generally fallen into two categories: (i) prevention of contact spread by initiation of barrier-isolation practices; and (ii) reduction in the use of antibiotics to prevent resistant strains developing. Studies supporting these approaches are discussed. Additional studies of the efficacy and cost-effectiveness of these measures relative to other control measures will be necessary to determine what priority should be given to these suggested approaches for the containment of resistant hospital pathogens.

HYGIENE IN THE OPERATING THEATRE

1133. CUMPSTON, P. and NARASIMHAN, S. **Pseudomonas infection and the anaesthetist.** *Anaesthesia and Intensive Care*, Potts Point, N.S.W., 1979, Nov., vol. 7, no. 4, pp. 377-380.

Cultures of specimens taken from anaesthetic equipment at the Liverpool Hospital, Liverpool, New South Wales, after routine cleansing and decontamination revealed contamination with *pseudomonas aeruginosa*. Current practices were obviously ineffective and pasteurization of anaesthetic equipment was found to reduce contamination significantly. Endotracheal tubes are now placed in paper bags before autoclaving to prevent contamination occurring after autoclaving and before packaging. The use of a heating element in the water trap unit of theatre sinks in order to heat water in the trap to a temperature sufficient to destroy bacteria is also being considered. Many anaesthetists do not give enough attention to the decontamination of the equipment they use in the 'sterile' area of the operating theatre. Although *pseudomonas aeruginosa* is an organism of low pathogenicity, patients having major surgery may be affected. Adequate decontamination of equipment and sinks, frequent hand-washing and the use of disposables is, therefore, to be recommended.

STERILIZATION

1134. DAUPHIN, A., FAURE, P. and NAGEOTTE, A. Les sachets de stérilisation. **[Sterilization packages.]** *Techniques Hospitalières*, Paris, 1980, March, vol. 35, no. 414, pp. 53-61.

This article is a guide to the types of sterilization packs available on the French market. A general description of the products, an analysis of the relevant French legislation, and an examination of the properties of the paper used in the packs are followed by ten tables: (i) the different types of sterilization packs which can be used in the hospital; (ii) definition of the different categories of paper (coated, partially coated, not coated); (iii) the different packs available on the French market; (iv) number of grams per square metre and thickness of the different sheets of paper used in the packs; (vi) resistance to bursting and resistance to lengthwise and crosswise stretching of the different papers; (vii) resistance to bursting and resistance to lengthwise and crosswise stretching of the plastic materials; (viii) permeability of the different papers to air; (ix) properties of the packs; and (x) force and total energy required to open the packs. There are also four diagrams and two photographs.

1135. SHEEN, John. **Progress in papers for sterile packs.** *Hospital and Health Services Purchasing*, London, 1980, May, pp. 148-150.

Sterilization papers are special kraft packaging papers which are used in a variety of forms to package clinical articles which are to be sterilized, and which must remain sterile until used. Although kraft paper is being replaced by plastics in general packaging, it is still preferred for technically demanding applications like sterilization packaging. The reasons for this pre-eminence are explained by considering their use in the three most commonly used sterilization methods: pressurized steam (autoclaving); gas sterilization (using ethylene oxide); and gamma radiation.

AIR HYGIENE

1136. HOWORTH, F. H. **Air flow patterns in the operating theatre.** *Journal of the Society of Environmental Engineers*, London, 1980, June, vol. 19, no. 85, pp. 29-33.

Bacteria-carrying particles and exhaled anaesthetic gases are the two contaminants found in the air flow patterns of operating theatres. Their origin, direction and speed have been demonstrated by a motion picture using schieren photography and smoke tracers. Compared with a conventionally well air-conditioned operating theatre, it is shown that a downward flow of clean air reduced the number of bacteria-carrying particles at the wound site by 60 times and the total body exhaust worn by the surgical team by a further 12 times. Using both these systems, patient infection was reduced from nine per cent to between 0.3 and 0.5 per cent, even when no pre-operative antibiotics were used. Anaesthetic gas pollution was measured and shown to be generally 1,000 ppm at the head of the patient. A high volume, low pressure active scavenging system with its various attachments, including one specially for paediatric scavenging, showed a reduction of N_2O pollution to between zero and three ppm. The economy and cost effectiveness of both these pollution control systems were shown to be good due to the removal of health hazards from patients and theatre staff, in addition to the energy conserved by the re-use of clean air.

SAFETY MEASURES

1137. CLAUSS, R. Zuständigkeit und Verantwortung im Rahmen des sicherheitstechnischen und arbeitsmedizinischen Bereiches im Krankenhaus. **[Responsibility for technical safety and industrial medicine in the hospital.]** *Krankenhaus-Umschau*, Kulmbach, 1980, May, vol. 49, no. 5, pp. 338-340.

West German legislation on technical safety measures and industrial medicine, and the persons responsible for it, is set out with special reference to its application to hospitals. It is dealt with under the following heads: duties and responsibilities of the authority; duties of insured persons; the chief administrator as the responsible officer; the appointment of safety officers; the appointment of specialists in industrial safety; and the position as regards the safety of patients. It is stressed that the chief administrator is responsible for safety, including industrial safety, within the hospital in which he works.

ACCIDENTS, GENERALLY

1138. GREENBERG, Frederick E. **A safe psychiatric unit.** *Hospital Topics*, Sarasota, Fla., 1980, May/June, vol. 58, no. 3, pp. 34-36.

The New York State Office of Mental Health does not have its own code and therefore when psychiatric units are located in general hospitals anywhere in the state, Hospital Code regulations apply. In the case of construction standards, only one page is devoted to psychiatric units. The requirements in the Hospital Code relating to patient safety are listed. These are minimal and in most cases so general

that they are open to differences of interpretation. Some suggestions are contained in *Safety guide for health care institutions*, a joint publication of the American Hospital Association and the National Safety Council, but could not be used as a planning guide. The author, working in conjunction with other planners, hospital administrators and hospital staff, has developed additional requirements, which are listed. At best these requirements, when used in conjunction with Hospital Code requirements, will provide an environment that is nearly free of potential hazards.

ELECTRICAL ACCIDENTS

1139. ZUMENTS, George. Consideraciones de energía y seguridad en el uso de equipos electroquirúrgicos. **[Energy and safety considerations in the use of electrosurgical equipment.]** *Hospital*, Miami, Fla., 1980, Feb./March, vol. 36, no. 1, pp. 24, 26-28.

This article emphasizes the need for safety precautions when electrosurgical techniques are employed. In most operating theatres the energy sources are earthed and the floor is a good conductor of electricity; this prevents shocks and sparks which might lead to fire or an explosion when inflammable materials and gases are used. In an up-to-date theatre, protection has to be provided against micro-shock; for this reason each item of equipment is earthed. Most new units have an alarm or monitor fitted to the plate (dispersor electrode) underneath the patient, and this emits a signal when there is a break in the flow of energy in the return cable. It is suggested that: the plate beneath the patient be placed as near as possible to the point of surgery; that care be taken to ensure that good contact between the patient and the plate is maintained throughout; that all other electrodes and leads from other instruments and apparatus be positioned as far as possible from the site of the operation; that monitor electrodes with a large contact surface be used; and that all equipment and electric wires be inspected regularly for breaks and/or fraying. Finally, the advantages of bipolar techniques and the principles of endoscopy are explained. The article includes five explanatory diagrams.

PLANNING FOR MASS EMERGENCIES

1140. WEIDNER, William A. and others. **The impact of a nuclear crisis on a radiology department.** *Radiology*, Easton, Pa., 1980, June, vol. 135, no. 3, pp. 717-723.

Medical radiation emergencies have occurred very infrequently; as a result there has been considerable apathy regarding radiation emergency plans at many hospitals. This has changed dramatically since the accident at the Three Mile Island Nuclear Power Plant. The Milton S. Hershey Medical Center, Hershey, Pa., was one of the closest medical facilities to the plant. This paper describes the experiences of the hospital's radiology department following the accident. The hospital has a contract with the plant to provide decontamination and treatment for personnel from their facility and its basic medical emergency radiation plan was activated as soon as the accident was announced. Three days after the accident, the hospital was asked to prepare for the possibility of large numbers of contaminated individuals from the

surrounding communities; and the possibility of evacuation of the hospital. As a result the plan was re-evaluated, though the danger to the population proved to be grossly exaggerated. In a radiation emergency, the radiology department should: (i) provide a source of information and advice for the medical staff; (ii) be able to deal with the press, public inquiries, private industry and state government agencies; (iii) plan and implement procedures for the reception of patients from the crippled power plant and surrounding communities; and (iv) plan for a large-scale evacuation of a medical facility within a 10 to 20 mile radius of a nuclear accident.

THE PATIENT

WELFARE OF THE PATIENT

See also Abstract Nos. 1054, 1112-1115, 1153, 1178, 1179, 1196

1141. BAKER, Bruce W. and KASTELIC, Frank A. **Patient care: four steps toward increasing positive interactions between hospital staff and patients.** *Hospital Forum*, San Francisco, Calif., 1980, April/May, vol. 23, no. 3, pp. 12, 14, 15.

Rapid technological advances in hospitals may lead to a neglect of the basic staff-patient relationships so essential to good patient care. Continuing education for all types of hospital employees about ways to improve these relationships is essential. Often staff and patients have differing expectations of how they should treat each other and communication breaks down as a result. Positive interactions between staff and patients can be measured by a number of successful outcomes such as reducing patient anxiety and increasing patient compliance. The following are a number of ways in which staff-patient relationships can be improved: (i) realizing the limits set on relationships by changes in a patient's condition; (ii) understanding of the patient's need for security; (iii) staff training in techniques to encourage patients to express their feelings; (iv) provision of physical comfort and factual information; and (v) providing resources to support the psychological needs of staff.

1142. BOKMA, J. Brede aanpak gewenst bij regeling nieuwe bezoektijden. [**A broader approach is desirable in fixing new visiting hours.**] *Ziekenhuis*, Utrecht, 1979, Dec. 5, vol. 9, no. 23, pp. 600-603.

Changes in rules for visiting hours rarely originate on the basis of patients' wishes: more often they stem from the need to coordinate the working schedules of the various services in the hospital. This need arises strongly when a new hospital is opened. New rules should be evolved by a working party consisting of representatives of management, nursing wards and medical staff, administration and paramedical staff, plus some ex-patients. The first task of the group is to agree on a set of overall guidelines, including how much weight to give the wishes of patients. Can the work done for the patient—nursing, examinations, treatment—be combined in principle with the presence of visitors? Alternatives to the existing system should be worked out. The layout of the buildings must be taken into consideration and arrangements in other hospitals studied. The rules should be given a trial run for a year, so that teething troubles will not lead to their abandonment before they have had a chance

to work. Ways of evaluating the results should be agreed on before starting the new rules. In an ideal hospital there would be separate bed buildings and a communal area where patients who are able can spend time and receive visitors. There could be a shop and cafeteria and perhaps a hairdresser. When there are fewer patients and visitors in the bed wards during the day, visiting regulations can be more flexible.

1143. MAGILL, Kathleen A. **Planning a hospital-based patient education system.** *Hospital Topics*, Sarasota, Fla., 1980, May/June, vol. 58, no. 3, pp. 20-23.

Most health care professionals now recognize patient education as an integral component of health care. Hospitals, with their complex mix of health care professions, consumer population needs and competing bedgetary priorities, frequently encounter problems when attempting to establish patient education systems. This paper presents advice on the policy, aims, planning and organization of a hospital patient education system.

1144. WIENHUES, J. Unterricht als Gegenwirkung—Schulunterricht als Hilfe zur psychischen Bewältigung von Krankenhaus-aufenthalten. **[Instruction as counteraction—hospital school education as a help in coping emotionally with hospitalization.]** *Rehabilitation*, Stuttgart, 1980, May, vol. 19, no. 2, pp. 107-114.

A questionnaire was given to 128 junior secondary school children who had spent at least three weeks in hospital; half of them had had no lessons during this period, while the other half had had regular tuition. Factor analysis of the replies showed that the children in the latter group were much less negative in their attitude to nurses and doctors. The author uses these findings in a general discussion of children's psychological reactions to being in hospital, which he lists as: protest, despair, resignation, regression, passivity, anonymity, and inferiority. He points to the restrictions on motor and sensory activity and the reduced opportunities for social interactions and communication in hospital, and suggests that children are prone to develop uncertainty about role function, and their emotional capacity may be lastingly impaired. He discusses remedies and preventive measures, including play therapy for younger children and regular lessons for the older ones.

1145. NATIONAL ASSOCIATION FOR THE WELFARE OF CHILDREN IN HOSPITAL and KINGSTON POLYTECHNIC. SCHOOL OF GRAPHIC DESIGN. **Second annual report, October 1979. NAWCH research project.** London, National Association for the Welfare of Children in Hospital, in association with Kingston Polytechnic, 1979. 15pp.

A research project has been undertaken to produce educational material which will help prepare a young child for hospital. A selection of highly visual preparation games have been produced and it is hoped to produce further games to widen understanding and reduce the anxiety and emotional distress. Jigsaw puzzles and booklets are the main methods used; some research is being conducted to assess effectiveness.

1146. STEADMAN, Henry J. **Attempting to protect patients' rights under a medical model.** *International Journal of Law and Psychiatry*, Oxford, 1979, vol. 2, pp. 185-197.

The revisions to the Mental Health Act 1959 proposed by the government and

MIND (the National Association for Mental Health in Great Britain) are focused on protecting patients' rights in the context of evolving practices for the treatment and detention of the mentally disordered. However, their approaches and remedies diverge markedly. The government paper is mainly concerned with minor statutory revisions to process the mentally ill more easily and appropriately, while MIND recommends much more fundamental changes in concepts, medical roles and necessary legal safeguards. This paper examines the specific assumptions of both reports in three areas: (i) recommendations about the need for precise definitions; (ii) different approaches to the use of the dangerous standard; and (iii) consideration of the stigmatization of compulsory admission. While the paper concentrates on compulsory admissions (only 10 per cent of patients admitted under the Mental Health Act) it was the most direct way to clarify the working models of both efforts and to contrast their positions. Until there is less adherence to the pure medical model for community psychiatry than is evident in the government paper, as well as more concern with political viability of legal remedies for the mentally ill based on the empirical realities, marginal increase in real rights and opportunities for the mentally ill is the best that can be anticipated.

HOSPITAL SOCIAL WORK

1147. COULSHED, Veronica. **A unitary approach to the care of the hospitalised elderly mentally ill.** *British Journal of Social Work*, London, 1980, vol. 10, no. 1, pp. 19-32.

Social work intervention in a short-stay rehabilitation ward for 17 mixed-sex patients diagnosed as suffering from senile dementia is described. The social worker perceived a need for closer relationships amongst members of the client system—the patients, their relatives and ward staff. The selected targets for change were the patients and the nursing system. The author, as major change agent, worked alongside the nurses in forming an action system whose long-term goals were to enhance ward morale and consequently standards of patient care. The methods of intervention were twofold: the social worker enlisted the skills of a psychologist who taught the techniques of reality orientation therapy for patient rehabilitation; and, simultaneously, the social worker, acting as leader consultant, set up weekly staff group meetings where literature on ageing was read and discussed, resulting in increased awareness of the needs of the client system. Both strategies are considered for enriching the quality of life and improving working conditions in low turnover institutions where opportunities for patient/staff interaction are at a maximum.

THE GENERAL PRACTITIONER AND HIS PATIENTS

See Abstract Nos. 1154, 1155

TRANSPORT OF PATIENTS

1148. FLEXER, Morton. **The helicopter ambulance: essential medical service.** *Hospital Progress*, St. Louis, Mo., 1980, May, vol. 61, no. 5, pp. 66-71.

Aeromedical evacuation by helicopter, adapted from military practice, enlarges the scope of emergency care. The latest directory of heliports in the United States lists

690 hospital operators. Fewer than 30 of these also maintain helicopter ambulance services. Only one owns its own helicopter. The balance have lease arrangements for craft and crew. Replies to a questionnaire suggest that most heliports were constructed at a cost outside the certificate of need (CON) process or that they were not submitted for CON approval. Three operating options are possible: owning the helicopter outright; leasing craft and crew services; and, the most common, a split service arrangement whereby the hospital provides the heliport and an outside agency provides the helicopter service. Capital and operating costs are examined, including details from four CON applications. Programmes must be tailored for the individual hospital. Some requirements that must be met and some caveats are presented.

1149. STENSRUD, Richard L. **Hospital-based air ambulance service extends emergency care.** *Hospital Progress*, St. Louis, Mo., 1980, May, vol. 61, no. 5, pp. 72-76.

In March 1979, St. Louis University Hospitals initiated an air rescue service, Medical Air Rescue Corps (MARC). The experience gained is presented as a case study which may be of use to other hospitals contemplating a similar venture. It covers: equipment and size specifications; financial considerations; mission forecast; and rate setting. It is believed that a helicopter service should have a community-wide orientation and provide high efficiency and high quality patient transport for all hospitals in the service area.

HOSPITAL CARE

See also Abstract Nos. 1093, 1120, 1123, 1173, 1176

1150. MCGILLOWAY, F. A. **The nursing process: a problem-solving approach to patient care.** *International Journal of Nursing Studies*, Oxford, 1980, vol. 17, no. 2, pp. 79-90.

The idea of a problem-solving approach to patient care, termed the nursing process, evolved in response to the questions being generated about the role of the nurse in the provision of care. This paper is an attempt to summarize and highlight the prevailing experience and opinions with regard to a limited number of elements which are of particular concern in describing the nursing process, and in developing further knowledge concerning the importance of the process for the provision of nursing care. These elements are discussed under the headings: assessment; the care plan; implementation; and evaluation. Nursing behaviour is influenced by expectations of the future; discrete acts are linked in goal-directed processes characterized by a self-regulating and continuous evaluation of actual in relation to intended states. Discrepancies between what is thought to be both desirable and realistically possible on the one hand, and present levels of performance on the other, provide the motivation for the formulation and implementation of policy and initiate remedial action. A list of 57 references to the literature is included.

1151. KELMAN, Steven. **Improving doctor performance: a study in the use of information and organizational change.** New York, London, Human Sciences Press, 1980. 349pp. (Center for Policy Research Monograph Series Volume 1) ISBN 0 87705 444 4 £16.25

This book examines the role of hospital-based systems for gathering comprehensive

information on patient care and for providing systematic reviews of professional performance, in order to improve standards. Four detailed case studies are given and a description of 'Professional Activity Study'—a data system of patient care run by the Commission on Professional and Hospital Activities.

1152. SHAW, Charles D. **Looking forward to audit.** *British Medical Journal*, London, 1980, June 21, vol. 280, pp. 1509-1511.

Whatever the misgivings of individual doctors, the formal support being given by professional bodies suggests that medical audit will become established in Britain. It is therefore appropriate to heed the advice of pioneers in the field in choosing methods and topics for audit. Practical problems can be anticipated because of the inadequacy of medical records, retrieval systems, and comparable information on practice patterns and evaluation of traditional processes of patient care. The criterion system of audit may provide a common standard for effective review. This can be used for any group of patients with some characteristics in common. It requires good records and a good records staff. Whatever method is adopted, central support should come from the Royal Colleges, with community physicians and clinical tutors assisting clinicians at the local level. The requirements for audit may be summarized as information, resources, and willingness to participate.

TERMINAL CARE

See also Abstract No. 1113

1153. SILVER, Richard T. **The dying patient: a clinician's view.** *American Journal of Medicine*, New York, 1980, April, vol. 68, no. 4, pp. 473-475.

Knowledge of how contemporary man relates to death is meagre. In the absence of systematic research, it is necessary to rely heavily on the beliefs, observations and writings of philosophers, theologians, artists and poets for interpreting and understanding death. The author's experience as an oncologist affords him a different perspective. The patient's first response to the knowledge that he possesses a progressive terminal illness is highly variable, but most often it is one of disbelief, shock and denial. Very few patients accept the information stoically and promptly attend to unfinished business and personal affairs in a highly efficient fashion. The question as to whether patients should be told the nature of their illness is extremely complicated. The care of a seriously ill patient consists of crises punctuated by admissions to hospital. When it is finally concluded that a patient is dying, the patient enters a critical phase of medical and interpersonal relationships. The particular problems of this period are discussed. The author comments upon the current vogue of discussion and advice about the process of dying. The general discussion of the subject should continue, but in a low key, leaving the informal processes to slowly percolate and develop.

HOME CARE, AFTER-CARE

See also Abstract No. 1200

1154. MILLS, Anne. **Hospitals and primary health care.** *World Hospitals*, London, 1980, May, vol. 16, no. 2, pp. 24-29.

This is a report of a pilot survey sponsored by the International Hospital Federation

to find out about hospital-linked developments in primary health care. The report contains summaries of such developments in a number of countries in Africa, the Middle and Far East, South-East Asia and Latin America. The items covered are collected under the following categories: (i) services provided at the hospital for direct community access; (ii) regionalization of health care; (iii) visits of hospital staff to provide primary services; (iv) supplies provided by hospitals; (v) hospital research activities in community settings; (vi) staff training to provide local services; (vii) joint provision by hospital and community of certain types of care; (viii) integration of activities; and (ix) integration of health sectors with other sectors. The projects described are: the Palli Shishu Clinics in Bangladesh; the Mallur Health Co-operative Centre, India; Family Care Services in Pakistan; Family Practice Residency Programme, Bahrain; Marakwet Community Health Project, Kapsowar Hospital, Eldoret, Kenya; joint maternity service in Singapore, home nursing service in Singapore; a proposed primary health care plan in Ghana; Korea Community Medicine Corporation; and four health centres linked to the Valverde Vega Hospital, Costa Rica.

SPECIAL DEPARTMENTS

ADMISSION UNITS

1155. LETTINGTON, W. C. and JUVONEN-LETTINGTON, L. A. **Classification of hospitalisation instances from a general practice.** *Health and Hygiene*, London, 1979, Oct./Dec., vol. 3, no. 2, pp. 97-100.

To gain insight into the relative role of the general practitioner (GP), hospital doctor, community health specialist and other health service staff in bringing about admission to hospital, the authors looked at 125 consecutive in-patient admissions over 16 weeks from 1 December 1978; a total of 119 patients were involved, of whom seven died. The patients were classified under seven headings: direct referral by GP for in-patient care (GP1); in-patient care within one year of GP referral to out-patient department (GPH2); as GPH2 but after one year (GPH3); direct admission without GP involvement (H1); subsequent admission after previous casualty or out-patient consultation without GP involvement; direct referral to out-patients by a community health specialist (CH); and direct access by a woman for confinement (DA). The GP was found to play a major direct role (GP1—35.2 per cent) and an indirect role (GPH2—23.2 per cent) in getting patients into hospital. Varying degrees of hospital-based autonomy existed within the admissions system and 28 per cent of admissions (excluding DA) occurred independently of the GP. Some of the H1 non-accident, home-based or ambulatory admissions need not have occurred if earlier resort had been made to GP services. The findings point to a need for more health education of the public directed towards diminishing the number of non-accident 'crisis casualty consultations'.

WARDS

See Abstract Nos. 1083, 1195, 1196

OPERATING SUITES

See also Abstract Nos. 1084, 1136, 1180

1156. MURMANN, J. **The development of X-ray engineering in the operating theatre.** *Electromedica*, Erlangen, 1980, no. 2, pp. 50-58.

This paper traces the history of the use of diagnostic X-ray equipment in the operating theatre in the following stages: the initial situation after the discovery of X-rays; X-rays become a recognized surgical tool; the end of the pioneer period in intra-operative X-ray engineering; the advent of X-ray engineering and electronics in the operating theatre; and the possibilities of electronics. Since the discovery of X-rays, virtually no change has been made in the basic principle of their technical production, but the necessary mechanical and electrical components have been constantly improved and expanded. Not until advances had been made in the field of electronics did it become readily possible to integrate relatively complicated X-ray equipment into surgical routines. The introduction of electronics, and the associated simplification of equipment operation, have finally permitted X-ray engineering in the operating theatre to become what it should really have been ever since the discovery of X-rays—the most important accessory to a surgical intervention.

1157. CLIFF, K. S. **An investigation into the causes of lost operating theatre sessions.** *Health Trends*, London, 1980, May, vol. 12, no. 2, pp. 31-33.

As part of a study to ascertain the extent and causes of growing surgical waiting lists in a multi-district area health authority, the number of operating sessions lost during a six-month period (January to June 1978) was examined. The reasons for cancellation were collated under four headings: medical staffing; theatre staffing; statutory holidays; and all other causes. A table shows the number of sessions lost in the four health districts under the four headings for each of the six months of the study. It shows notable variations between one district and another. During the study period a total of 3,706 hours of operating time were lost, representing some 1,059 operating sessions. This was equivalent to the loss of 4,236 patient admissions, or approximately the average annual work load of a 90-bed general surgical unit (including both emergency and elective admissions). The main cause was statutory holidays, which accounted for 31 per cent of all sessions lost. Manpower problems of theatre staff and medical staff accounted for 25 and 11 per cent respectively of all sessions lost.

ANAESTHESIA

See also Abstract Nos. 1075, 1133

1158. PARKHOUSE, James. **The journey and the arrival.** *Anaesthesia*, Oxford, 1980, June, vol. 35, no. 6, pp. 548-558.

The present motivation, recruitment and career structure of the specialty of anaesthesia in England and Wales are examined and assessed in relation to training and the needs of the National Health Service. It is suggested that training might consist of a four-year basic programme in a centre for each region, focused on a university with a medical school, encompassing all varieties of clinical work with

progressively increasing personal responsibility and including a year of experience in medical care. This could be followed by a period as a junior consultant, instead of as a senior registrar, spent in a non-teaching hospital. There should be a senior consultant grade, mostly of those working outside the teaching centres, a clearly established non-consultant career grade and full use should be made of specially trained nurses as assistants. The feasibility of introducing this system over a long period is discussed and proposals for continuing education are also made.

PHARMACY

See also Abstract No. 1106

1159. CULLEN, A. M. S. and MAXWELL, J. **Quality assurance—a developing specialty within hospital pharmacy in Great Britain.** *Australian Journal of Hospital Pharmacy*, Heidelberg, Vic., 1980, March, vol. 10, no. 1, pp. 24-27.

As a result of the Medicines Act 1968 it has been necessary to develop quality assurance facilities in hospitals to meet the requirements of good manufacturing practice. This paper describes progress in the development of quality assurance as a part of the hospital pharmacy service. Each region has a principal pharmacist responsible to the regional pharmaceutical officer for the co-ordination and monitoring of quality assurance activities within the region. Some regions have regional quality assurance laboratories, but in most regions they are at area level; there are also a few district laboratories. The staff, equipment and work of the quality assurance laboratories are described and future developments are discussed. Although the system is imperfect it seems to work and good progress is being made.

1160. LUKEMAN, Jack. **Planning the Ealing hospital pharmacy.** *Pharmaceutical Journal*, London, 1980, June 28, vol. 224, no. 6079, pp. 733-736.

Planning of the new Ealing Hospital, London, began in 1962 and it opened in November 1979. This gestation period coincided with a period of growth and change in hospital pharmacy. This paper shows how pharmacists associated with the project attempted to parallel those professional changes with alterations in the design of the department. Three plans show the department at each stage of its evolution: initial design (1965), first upgrading (1975), and upon completion (1979). The ways in which changes in practice have affected the design are described under the headings: development of ward pharmacy; dispensing; distribution; manufacturing; buying; changes in the law; and changes in organization. The end product is a compact pharmacy in which all activities other than reserve and bond storage are located within a single area of some 4,500 square feet floor space. Four photographs are included.

1161. WITTE, Kenneth W. and others. **Drug regimen review in skilled nursing facilities by consulting clinical pharmacists.** *American Journal of Hospital Pharmacy*, Washington, D.C., 1980, June, vol. 37, no. 6, pp. 820-824.

A group of clinical pharmacists incorporated as Clinical Pharmacy Consultants (CPC) provided consultative services through contractual agreements with pharmacy vendors or skilled nursing facility administrators. Using a drug regimen review

model designed by CPC, the consulting pharmacists reviewed 13,081 medical records at 10 skilled nursing facilities. Of the reviews, 928 (7.1 per cent) indicated potential or real drug therapy problems; on an annual basis this corresponds to approximately eight drug therapy problems per 10 beds per year in a skilled nursing facility. About 60 per cent of the problems could be attributed either to prescribing of medication with no documented indication (23.9 per cent) or to lack of objective data for monitoring the effectiveness of drug therapy. It is concluded that consulting clinical pharmacists could help to improve patient care in skilled nursing facilities through drug therapy review and staff consultation.

1162. TRUDEAU, Terry. **A simple work measurement system that can aid in effective production planning.** *Hospital Pharmacy*, Hagerstown, Md., 1980, May, vol. 15, no. 5, pp. 229-233.

The advent of increased controls in the hospital field has made the more efficient use of available resources mandatory. Production planning is the mechanism by which these efficiencies can be achieved in the pharmacy department. Ongoing measurement of various work components must be conducted and retrospectively compared to make meaningful use of production planning techniques. The pharmacy at the 270-bed Brokaw Hospital, Normal, Ill., uses a computerized unit dose drug distribution system combined with total intravenous admixture and monitoring services. It has developed an internal measurement system based on key variable weighted units of service. Each work component is assigned a value depending on time needed (in minutes) for completion. The units are tabulated daily, with the monthly total being divided by departmental man-hours to yield a monthly productivity ratio. This ratio is used as an aid in making decisions related to work assignment and staff scheduling. Compared against the productivity of a benchmark month of known departmental efficiency (derived by measuring all activities for the month divided by man-hours used) projections can be made for future manpower requirements.

1163. STEWART, Ronald B. **Adverse drug reactions in hospitalized patients.** *Pharmacy International*, Amsterdam, 1980, April, vol. 1, no. 4, pp. 77-79.

With few exceptions, studies have shown that 10 to 20 per cent of hospital patients suffer from adverse drug reactions. The majority are minor problems. Since most reactions are pharmacological in nature and are usually well-known toxic or side-effects, many could be prevented by more careful prescribing and dosing and more effective drug monitoring. Drug-related problems are also a significant factor leading to hospital admission. Adverse drug reactions result in increased costs, but there are limitations in the information available on them. A major factor leading to drug-induced illness is the increased use of drugs. The pharmacist has a role in preventing adverse reactions through drug monitoring, drug utilization review and reporting adverse drug reactions.

1164. BRODIE, Donald C. and SMITH, William E. **Description of pharmacy services 'a case report', July 1979.** *Australian Journal of Hospital Pharmacy*, Heidelberg, Vic., 1980, March, vol. 10, no. 1, pp. 28-33.

This paper describes the pharmacy department of Memorial Hospital Medical

Center, Long Beach, Calif. Pharmaceutical services are provided from decentralized in-patient pharmacies, which are serviced from a central laboratory and storeroom, and from an out-patient pharmacy in the lobby of the hospital. The department is staffed by 49 pharmacists and 45 non-pharmacists (secretaries, clerks, technicians). The functions of the department are carried out through seven structural elements: administration, drug distribution, professional and clinical services, drug information service, quality assurance, education, and research. Each of these is described briefly. The clinical pharmacy programme is described in some detail. Future plans for the department are outlined.

1165. WITTE, Kenneth W., NELSON, Arthur A. and HUTCHINSON, Richard A. **Effect of pharmacist consultation on rational antimicrobial therapy.** *American Journal of Hospital Pharmacy*, Washington, D.C., 1980, June, vol. 37, no. 6, pp. 829-832.

In 1974 the pharmacy at the University of Illinois Hospital, Chicago, prepared a plan to change pharmaceutical services from a traditional hospital practice to a decentralized pharmacy with clinical pharmacists assigned to patient care areas and providing clinical pharmaceutical services. This paper describes a study of the incidence of rational decisions concerning antimicrobial therapy before and after the establishment of the new service. A protocol was designed to determine the rationality of physician orders for antimicrobial therapy. This protocol was used to analyze retrospectively the medical records for patients admitted to a 30-bed medical unit and a 30-bed surgical unit during the two months before and after clinical pharmaceutical services were initiated. The results showed that exposure to routine clinical pharmaceutical services appeared to improve prescribing rationality only of drugs used to treat infectious conditions. Since the study design had no control group the causal effect on the rationality of antimicrobial therapy could not be determined; however, the use of an organized protocol in monitoring antimicrobial therapy allowed an assessment of the use and misuse of antimicrobials in hospitals.

1166. CASPE RESEARCH PROJECT. **Drug costing: the state of the art; a report of a day seminar held at the King's Fund College on 16 November 1979.** London, CASPE Research Project and King Edward's Hospital Fund for London, [1980]. [ii], 33pp.

The meeting reported here was given several papers on the systems used in various parts of Britain to monitor drug costs. Some proposals were made to delegate costing to the clinical team level and produce a local formulary in the hope that doctors would voluntarily reduce costs.

1167. BRANDVOLD, J. L. **Antibiotic utilization monitoring—study and review in a Canadian teaching hospital.** *Canadian Journal of Hospital Pharmacy*, Saskatoon, Sask., 1980, March/April, vol. 33, no. 2, pp. 51-56.

Patients receiving gentamicin, cephalosporins and penicillinase-resistant penicillins were monitored by pharmacists in the 536-bed University Hospital, Saskatoon. Of the 217 cases monitored, 56 per cent were considered to be rational therapy, 34 per cent were irrational therapy, and 10 per cent were questionable. The use of antibiotics was most rational in the neonatal intensive care unit and on medical

wards. A high degree of irrational therapy was identified on surgical wards where the use of antibiotics for prophylaxis was highest.

LABORATORIES

See also Abstract No. 1111

1168. WATSON, D. **Analytical investigations closer to the patient.** *British Medical Journal*, London, 1980, July 5, vol. 281, pp. 31-35.

Do-it-yourself bioanalytical equipment that requires no analytical skill to operate is currently available for use outside the laboratory, usually by a doctor or nurse, though not always. The obvious advantage is that the occasional do-it-yourself test may provide faster diagnosis and management. There are also problems, not the least of which is that of quality assurance. The desirability and implications of bedside or near-bedside analyses are considered under the headings: need for non-laboratory based diagnostic equipment; cost considerations; choice of test procedure, equipment, and reporting procedure; safety aspects; training and accountability of operators; maintenance of equipment and reagents; quality control, quality assessment, and reporting procedures; and future trends. Agreement is needed between the laboratory consultant and doctors and others using laboratory-type equipment and reagents in near-bedside analyses.

1169. VINTEN, Gerald. **Financial management of pathology divisions.** *Gazette of the Institute of Medical Laboratory Sciences*, London, 1980, June, vol. 24, no. 6, pp. 256-258.

Without up-to-date knowledge there will be an unequal partnership between the pathology and finance departments, in which the finance view will invariably predominate to the disadvantage of both departments and the health service as a whole. Although there can never be a perfect match among the demands of consumers, the views of the pathology division, and the policy decisions of management, the aim is to achieve the optimum end product. The input of the pathology division to the decision-making process will be seriously weakened if there is a lack of knowledge of the present state of planning and financial management. This first in a series of papers therefore concentrates on the current National Health Service planning system. It is considered that the system has failed to fulfil its promise. Failings in the system include: more unworkable planning profiles; divided understanding between central government and the operational service; lack of definitions of planning; absence of a mention of the main planning models; and lack of orientation in the field of programme budgeting.

DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract Nos. 1105, 1156

1170. CLAYTON, P. D. and others. **A radiology reporting system based on most likely diagnoses.** *Computers and Biomedical Research*, New York, 1980, June, vol. 13, no. 3, pp. 258-270.

A computerized system for ordering and reporting radiological examinations

has been developed at LDS Hospital in Salt Lake City, Utah. A unique feature of the system is the generation of a list of the most likely findings specific to each patient's examination. Radiology examinations are ordered from computer terminals located in each nursing unit and in the radiology department. The person ordering selects the desired procedure and indicates the reason for performing the examination by choosing from a list of the most common reasons associated with that procedure. The request generates a requisition/report form which lists five most likely findings and provides space for patient details. The reported information is stored as part of the patient record for use by the physician on the HELP system, an automated method of medical decision making. The operation of the system, which began in March 1978, is described in detail. Approximately 6,000 examinations per month are processed. As the method for calculating most likely diagnoses has improved, the system has been used by an increasing number of radiologists. This reporting system reduces the radiologist's work while providing enough information for patient care.

1171. SURRY, BELLET, M. and GUYADER, le J. Fonctionnement d'un tomodensitomètre crânien, au Centre Hospitalier Régional et Universitaire de Brest. **[The brain scanner at the Regional and University Hospital Centre, Brest.]** *Techniques Hospitalières*, Paris, 1980, March, vol. 35, no. 414, pp. 67-74.

The first brain scanner, a first-generation Densitome, was installed in the University Hospital in Brest at the beginning of 1978 but was replaced in October of that year by a later model, a third-generation ND 8000. The scanner department comprises an examination room, control room, computer room, secretary's office, records room, waiting room, toilets, and air conditioning and cleaning room—a total area of 110 square metres. The staff consists of four doctors, three technicians, a secretary, and a porter. Maintenance of the equipment is carried out once a fortnight. A total of 765 patients were examined in the first ten months of operation. Sixty per cent of the patients were sent by the neurosurgery and neurology departments, and about half the patients lived within a radius of six kilometres of the hospital. A positive diagnosis was obtained in 138 cases and a negative result in 322. The charge for each examination is 211 francs for an in-patient and 534 francs for an out-patient. More extensive use of scanners in the future will reduce the need for X-ray, radio-isotope, and echographic equipment.

1172. WRIGHTON, R. J. and OLIVER, R. M. **Trends in radiological practice in the NHS.** *Health Trends*, London, 1980, May, vol. 12, no. 2, pp. 21-24.

Radiological services in the National Health Service are under constant pressure to conduct more examinations and to use increasingly sophisticated technology whilst the specialty of diagnostic radiology remains seriously undermanned. This paper considers the basis for these assertions under the headings: work load; costs; sources of requests; types of examinations; manpower (radiologists and radiographers); and overuse. The curtailment of overuse is probably the most practical method of reducing the work load, but this cannot be achieved other than in the long term and at the expense of much effort in education to change clinicians' views of the clinical support services. Measures with some effect in the shorter term are needed. Two that are discussed are rationing of services and removing the need for radiologists to report on all films.

RADIOISOTOPE DEPARTMENT

See Abstract No. 1140

REHABILITATION

1173. Gossop, Michael. **Factors associated with the addicts' decision to remain in an in-patient treatment programme.** *International Journal of Nursing Research*, Rheinstetten, 1980, vol. 3, no. 1, pp. 92-94.

A preliminary investigation of the various factors associated with seeking admission to and remaining in an in-patient drug dependence treatment unit is reported. Forty subjects who requested admission to the unit at the Maudsley Hospital, London, were interviewed prior to admission, using a 28-item interview schedule. Two measures of behaviour were used: (i) whether the patient actually attended for in-patient admission; and (ii) the number of days for which the patient remained in treatment. The average length of stay was 46 days, although there were wide individual variations. The results show that motivation for treatment is one of the principal determinants of how long addicts remain in an in-patient treatment programme, but there is a complex interaction of motivational, cognitive and social factors associated with the addict's decision to seek in-patient treatment and subsequently to remain in treatment after admission.

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract No. 1185

1174. Arroyave, Fernando, McKeown, Steve and Cooper, Sally E. **Detoxification—an approach to developing a comprehensive alcoholism service.** *British Journal of Addiction*, Edinburgh, 1980, June, vol. 75, no. 2, pp. 187-195.

The Oxford Detoxification Unit was set up in 1975 as an extension to the service provided by the Regional Alcoholism Unit. The Unit has eight beds, bed occupancy is high and the average stay is five to six days. Referrals are accepted, often by telephone, from general practitioners, general and psychiatric hospitals, social workers and other sources. The population treated has remained fairly constant and 95 per cent of those in need are admitted at once or within a few days. Nearly 60 per cent of those treated in the detoxification unit proceed to the alcoholism treatment programme, showing that a wide range of alcoholics can be successfully treated after detoxification and assessment at a time of withdrawal. Treatment now depends less on drugs and more on counselling, resulting in the strengthening of links between the detoxification and the treatment units. A combined staff team have developed new approaches to the management of drinking problems. Detoxification is a three part process: (i) 'drying out'; (ii) full assessment of medical, social and psychological problems; and (iii) development of treatment and encouragement of motivation. A detoxification unit is most effective when it provides an open access service as part of an alcoholism unit.

INTENSIVE CARE UNITS

1175. SKINNER, Kathryn. **Support group for ICU nurses.** *Nursing Outlook*, New York, 1980, May, vol. 28, no. 5, pp. 296-299.

Intensive care units (ICUs) are now integral components of most general hospitals. The nature of the nurse's responsibilities in the ICU subjects her to excessive stress from several sources. It is generally recommended that ICU nurses participate in some type of emotional support group. This paper describes the development of such a group at Methodist Hospitals, Memphis, Tenn., by a clinical instructor of psychiatric nursing and the hospital chaplain. After orienting herself to the ICU setting, the clinical instructor organized meetings with the members of each shift to explain the goal of the support groups. Six strategies were used to assure the success of the groups: (i) create a climate of acceptance; (ii) establish reliability; (iii) guide the members to study better ways to communicate; (iv) help them recognize and accept their own feelings; (v) extract themes; and (vi) prevent premature closure of disturbing issues that emerge in discussion.

SPECIALIZED HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract No. 1186

1176. SAPIENZA, A. M. **Measuring productivity in an ambulatory setting.** *Hospital Medical Staff*, Chicago, Ill., 1980, April, vol. 9, no. 4, pp. 2-9.

A series of productivity measurements has been developed to assist in the planning and management of BIAC, the primary care group practice of Beth Israel Hospital, Boston, Mass. They are: (i) number of patient-care sessions provided by each staff member; (ii) number of patients seen per scheduled patient care session; and (iii) number of units per patient care hour. Data on each patient encounter with a care provider are entered in an outline computer system after each visit. These data are aggregated daily and are available to the manager in summary form at any time. The calculation and use of the measurements is described. Yearly budgets are based on the productivity measurements, which have resulted in increases in productivity. Auditing performance by the three measurements has three effects: (i) areas where improvement is needed can be highlighted; (ii) effectiveness of actions taken to improve performance can be monitored; and (iii) more sophisticated analyses of the practice by professional staff can be done.

1177. RYAN, Michael. **Planning the Soviet out-patient service.** *Social Policy and Administration*, Oxford, 1980, vol. 14, no. 1, pp. 23-31.

Out-patient care in the Soviet Union is provided in the polyclinic, the smaller ambulatory and less sophisticated health point. Dispensaries are single specialty establishments with in-patient accommodation. About 70 per cent of these units are classed as sub-divisions of hospitals. In 1947 urban hospitals and polyclinics were united with single budgets and staff establishments. As a result, in-patient services

increased to the detriment of out-patient services. In the 1950's staffing was separated and in the 1960's polyclinics increased but remained dependent on hospitals. However, in the plan for the years 1976 to 1980 an additional capacity in out-patient units of 400,000 visits per shift is included. The number of doctors needed in the polyclinics is calculated from the expected number of visits and the supply is generous. Development plans for out-patient units for 1979 shows that the planned number of consultations is nine per person and the average number of doctors and dentists per unit is 18.8. Future polyclinics will be larger and provide a wider range of specialties and, whether united with a hospital or not, will continue to express a technological approach to modern medicine.

CASUALTY AND ACCIDENT

See Abstract No. 1149

DAY HOSPITALS

1178. BHATTACHARYYA, B. K., ISHERWOOD, J. and SUTCLIFFE, R. L. G. **Survey of elderly day hospital patients during a period of industrial action.** *Age and Ageing*, London, 1980, May, vol. 9, no. 2, pp. 106-111.

As a result of industrial action by ambulance staff from 9 February to 26 March 1979 no patients were brought to Northampton day hospitals, though day centres operated normally. One hundred patients were attending St. Edmund's Day Hospital prior to closure; 55 were visited during the last two weeks of the strike and a questionnaire completed for each. This covered domestic circumstances, accommodation, mobility, self-care, mental state, assistance received, continence, medication, and any change during the period studied. In the short term there was a marginal effect on patients' physical and mental states; long-term closure of a day hospital could produce more significant effects. District nursing service visits were increased and in some cases nurses formed the only bridge between patients and the outside world. One day centre increased the attendance of two elderly persons not in the study; otherwise no extra load was shouldered by statutory or voluntary organizations. There was no increase in hospital admissions among the patients.

CHILDREN

See also Abstract No. 1145

1179. WELLER, Barbara Fiona. **Helping sick children play.** London, Baillière Tindall, 1980. x, 132pp. bibliog. ISBN 0 7020 0792 7 £2.95

Some health authorities now employ play staff, some of whom are specially trained. The nurse, however, is responsible for continuity of care and should provide for play opportunities and activities at all times. Since 43 per cent of children have been into hospital by the age of seven years the development of play facilities in hospitals is to be encouraged. Ideas are given in this book for toys and equipment. A short section deals with the special needs of adolescents and children with particular diseases. A lot of useful addresses are provided.

1180. SCHRADER, Elinor S. **Preparing children for surgery.** *NATNews*, Matlock, 1980, June, vol. 17, no. 6, pp. 11, 13, 14.

Admission to hospital and surgery are stressful events for children and their families, particularly for very young children. Older children are still affected by separation, but can deal with it more easily. Operating theatre nurses are interested in preparing children for their surgical experience, to help make it a positive event in which the child learns to handle stress and difficult situations. They are helping children in a number of ways, including pre-operative teaching, group pre-admission tours, and special teaching programmes for major surgery. Children who are prepared for their surgical experience usually recover more quickly with fewer complications. They are less apt to suffer from long-term emotional reactions. A calm and co-operative child is a better patient than a crying, unhappy one. The child who has had a good experience in hospital, will probably be less threatened by surgery as an adult.

GERIATRICS AND LONG-STAY

See also Abstract Nos. 1054, 1065, 1101, 1147, 1193

1181. KANE, Robert and others. **The future need for geriatric manpower in the United States.** *New England Journal of Medicine*, Boston, Mass., 1980, June 12, vol. 302, no. 24, pp. 1327-1332.

Additional medical manpower will be required to meet the growth in the numbers of the elderly in the United States population over the next 50 years. This paper provides estimates of the needs for medical geriatric manpower under four different models: continuation of the status quo; academic geriatricians only; provision of care by academic and consultant geriatricians; and provision of care by academic, consultant and primary care geriatric practitioners. Each option is further analyzed in terms of three levels of delegation to non-physician clinicians. The implications of these 12 patterns are projected to the year 2030, assuming present use levels and allowing for improved care of the elderly. The need for psycho-geriatric care is explored separately. It is thought that geriatricians should provide improved care, including both consultant and primary care, to people aged 75 years and older, and that they should delegate a moderate amount of responsibility to nurse practitioners, physician assistants, and social workers. On the basis of these assumptions, it is estimated that the United States will require between 7,000 and 10,300 geriatricians by the year 1990; the best intermediate figure is about 8,000.

1182. DAVIES, Ann D. M. and SNAITH, Pauline A. **Mealtime problems in a continuing-care hospital for the elderly.** *Age and Ageing*, London, 1980, May, vol. 9, no. 2, pp. 100-105.

As part of a study of the psychological aspects of continuing care, observations were made of 22 patients aged 60 to 94 years while they were eating their main meal of the day. The feeding skills of 12 of the patients were not sufficient to allow them to eat their meal with efficiency and comfort. Frequently the assistance offered failed to match the individual needs. Difficulties arose from ward organization, hospital management practice and district catering policy. An 18-item questionnaire was completed in interviews with 13 out of 19 nursing staff, the catering officer, one cook,

one assistant cook and the ward clerks. There were marked differences in what nurses regarded as 'therapeutic' and this led to inconsistencies in care. The importance of considering psychological aspects of the patients' environment is discussed.

1183. REISS, R. **Moral and ethical issues in geriatric surgery.** *Journal of Medical Ethics*, London, 1980, June, vol. 6, no. 2, pp. 71-77.

After discussing some preliminary definitions, the author examines the ethical questions arising particularly in the field of geriatric surgery. Aspects discussed are: attitude of the surgeon; attitude and legal rights of the patient and his family; economic considerations; and factors influencing surgical mortality in geriatric patients. The author finds no ethical justification for bias against the elderly patient as such in the allocation of scarce medical resources, nor for overriding his wishes in respect of treatment; solutions must be based on the circumstances of the individual case. Criteria for withholding surgery in life-threatening situations are discussed, but not endorsed, though pointers to decision-making are given, notably the value of the surgeon sharing responsibility through interdisciplinary consultations with colleagues.

UROLOGY

1184. CHANTLER, C. and others. **10 years' experience with regular haemodialysis and renal transplantation.** *Archives of Disease in Childhood*, London, 1980, June, vol. 55, no. 6, pp. 435-445.

In the 10 years since its inception, the regular haemodialysis/renal transplant programme at Guy's Hospital, London, has treated 75 children aged under 15 years; 13 have subsequently died. A combination of hospital and home haemodialysis and renal transplantation was used. Sixty-four children received 80 allografts; 37 first grafts were from live, related donors and 27 were from cadaver donors. The five-year actuarial patient survival for the whole group and for those who had transplants was 76 per cent. Particular experience was gained with home haemodialysis and live, related donor transplantation. Despite growth, and psychosocial and rehabilitation problems, the overall results were encouraging, particularly for the 46 children who had successful transplants. These children grew better, had fewer psychosocial difficulties and were rehabilitated more successfully into normal life than those on long-term dialysis. It is concluded that dialysis and transplantation should be offered to all suitable children with terminal renal failure.

1185. NICHOLLS, A. J. and others. **Integrated dialysis and renal transplantation: small is beautiful.** *British Medical Journal*, London, 1980, June 21, vol. 280, pp. 1516, 1517.

In terms of population served the renal unit in Aberdeen is small by British standards, providing an integrated dialysis and transplantation service for half a million. This paper outlines the advantages to be gained from such a unit, with regard to the number of patients treated and the number of transplant operations performed. The unit, which opened in 1967, comprises nine beds for patients on maintenance haemodialysis, a separate facility for patients with acute renal failure, and additional beds in a general medical ward for patients needing investigation and treatment in

hospital. Since 1975 renal transplantation has been performed in the hospital that houses the dialysis unit. The stock and flow of patients is summarized in four tables. The problem of harvesting cadaver kidneys has been solved; the present supply has not only enabled the number of patients on dialysis to remain stable but has resulted in a net export of kidneys.

VENEREAL DISEASE

1186. HACKER, Sylvia S., PALCHIK-ALLEN, Nancy S. and ROSEY, Craig E. **Factors influencing the success of a community VD program held in a University facility.** *Public Health Reports*, Washington, D.C., 1980, May/June, vol. 95, no. 3, pp. 247-252.

In 1972 the Michigan Department of Public Health implemented a gonorrhoea control project and in Washtenaw County, where incidence was high, a county health department venereal disease (VD) clinic was opened in 1975. A continued increase in caseload, particularly in hospital emergency departments, led the University of Michigan Health Service to open a new clinic in co-operation with the county. The University's Department of Health Education was involved in the careful planning of the VD programme. Procedures were developed to ensure privacy and VD education materials were reviewed and selected by health educators. All clinic staff were given two weeks' training which aimed to reduce the stigma associated with VD. Follow-up sessions and in-service training schemes for physicians and nurses were also planned. After its first year of operation, the clinic was being used extensively, causing a sharp decline in gonorrhoea morbidity. Evaluation of the clinic by clients was very favourable. Careful planning was a major factor in the community's use and acceptance of the VD clinic.

SURGERY

See also Abstract Nos. 1180, 1183

1187. NILSSON, Folke. **Limitations of the surgical contract.** *Journal of Medical Ethics*, London, 1980, June, vol. 6, no. 2, pp. 64-67.

Factors affecting the nature of the contract between patient and surgeon, which forms the basis of professional ethics, are examined with particular reference to Sweden. These factors include: the system by which the surgeon is rewarded for his work; political judgments about the allocation of scarce medical resources; the surgeon's work load as influenced by medical trade union pressure; and the need for continuity and for training of new surgical manpower. Although it is important to consider the demands of a changing society, surgeons must work together to protect their patients and their work from society when they are convinced that its ambitions of interference and control will not benefit but limit the contract between patient and surgeon.

1188. COOK, J. **The delegation of surgical responsibility.** *Journal of Medical Ethics*, London, 1980, June, vol. 6, no. 2, pp. 68-70.

Delegation of specific tasks during surgical operations to medical, nursing, technical or other assistants is acceptable, but it does not detract from the supervising surgeon's overall moral responsibility for his patient. Delegation of independent responsibility

to propose and complete curative operations to non-surgeons or less than fully trained surgeons cannot be justified ethically in a prosperous society. In a society too poor to provide reasonably full surgical cover, this principle may have to be modified. It is suggested that in such circumstances, the provision of surgical care without full surgical training might be ethically acceptable, though not surgery by the medically unqualified.

1189. SMITH, Lord. **Closing remarks on ethical problems in surgical practice.** *Journal of Medical Ethics*, London, 1980, June, vol. 6, no. 2, pp. 78-81.

In his closing remarks to a symposium on ethical and moral issues in surgery and surgical practice, the author dealt particularly with euthanasia in terminal illness, organ transplantation, and relationships between doctors and the state as employer. In the United Kingdom, the work of the Royal Colleges on a definition of 'brain death' is helpful in decisions about the continuance of artificial life support measures, and some further guidance on organ transplants is in prospect following the report of an official working party. State medicine poses no fundamental ethical problems for doctors as long as their employment contracts do not conflict with their basic and personal clinical responsibility for their patient. Nevertheless doctors in state service do become involved in resource allocation decisions with an ethical content. Opposition to the state as employer (by withdrawal of labour in whole or part) may only be justified ethically if the doctor's motive is the long-term benefit of his patients.

MATERNITY

1190. MOORES, Brian. **Towards rational midwifery service planning.** *Journal of Advanced Nursing*, Oxford, 1980, May, vol. 5, no. 3, pp. 301-311.

Quite fundamental changes in obstetric practice have taken place in the United Kingdom over the last few years and even more dramatic changes have been occurring in the birth rate. Midwifery recruitment, however, appears, on the surface at least, to owe as much to the capacity of the health service to offer training opportunities as it does to the real demand for qualified midwives. The national situation with respect to trends in the birth rate is examined and a somewhat surprising seasonal effect is identified. This material is then used to estimate the likely situation to be encountered at local level and in particular the effect at different levels of bed provision. In an attempt to translate these estimated births into work load figures recourse was made to regression analysis. Data from 417 maternity units relating both to outputs and inputs were secured, but the subsequent analysis proved abortive due to the correlation which exists between the variables. Estimates were therefore derived from the work of other authors. As some 42 per cent of practising midwives are aged over 40, the health service does not have to effect immediate changes to the intake to midwifery training. This should not delay attempts to predict births at local community level and translate them into the required number of midwives.

1191. BADEZZI, R. and others. Ipotesi di dimensionamento ed organizzazione della attività di ostetricia e ginecologia in una USL tipo. **[Suggested scale and organization of obstetrics and gynaecology activity in a typical Local Health Unit.]** *Ospedale*, Torino, 1980, May, vol. 33, no. 5, pp. 139-153.

Using epidemiological data and the standards imposed at national and regional

level, the authors propose an empirical method for determining the scale of obstetric and gynaecological activity in a local hospital, which is intended to be the centre of the Local Health Unit in the Italian National Health Service. Using statistics on hospital admissions in the region in the past and the average length of stay in a district hospital, they suggest that, for a population of 100,000, 64 beds will be required. They calculate the number of operating theatres needed from figures on surgical turnover in district hospitals. The expected birth rate is 950 per annum, and five labour wards will therefore be required. Out-patient facilities will be needed for 760 normal expectant mothers (seven antenatal visits each) and 190 expectant mothers at risk (12 antenatal visits), for echographic examinations, sex education, family planning, medical genetics, and for patients suffering from infertility. They propose that the staff should consist of 11 full-time doctors, 61 nurses, a psychologist, and a social worker. In conclusion, they suggest that the bed/population ratio of 0.75 per thousand imposed by the regional law is too high.

1192. CARTER, L. V. and others. **Obstetrics in small hospitals.** *Medical Journal of Australia*, Glebe, N.S.W., 1980, April 19, vol. 67, no. 8, pp. 359, 360, 362.

A case is presented in favour of continuing to practise obstetrics in small hospitals, using the experience of Boothville, a 20-bed maternity hospital in suburban Brisbane, run by the Salvation Army for unmarried mothers. Statistics from the hospital for the last four years (1,928 births) show a perinatal mortality of 9.0 per 1,000 total births including all transfers. It is submitted that uncomplicated obstetrics is proper to general practice. The patient can be given continuing care from conception, and sometimes even before, throughout pregnancy, labour and the puerperium, and on into the home situation. The local community is ideal for well-trained general practitioners, provided that consultant advice is available. Equally important are midwives who are versed in both normal and abnormal midwifery, with the wisdom to know the difference.

DENTISTRY

1193. DONATSKY, O., AHLGREN, P. and HANSEN, P. From. **Oral health status and treatment needs in long-term medicine patients in a Copenhagen hospital department.** *Community Dentistry and Oral Epidemiology*, Copenhagen, 1980, April, vol. 8, no. 2, pp. 103-109.

The oral health and dental treatment needs were investigated in 50 randomly selected long-stay patients admitted to Glostrup Hospital, University of Copenhagen. All the patients were clinically and radiologically examined. Oral health generally was poor. Two thirds (66 per cent) of the patients were totally edentulous, 24 per cent partially edentulous. Only 10 per cent were dentate with no dentures. The number of remaining teeth per patient averaged 4.7, that of caries destructed teeth 1.4. All 17 patients with remaining teeth had periodontal disease, and 13 of them suffered from caries. In total 82 per cent of the patients needed some kind of treatment, mainly prosthetic and oral surgery. The estimated total treatment time per patient averaged 165 minutes.

PSYCHIATRY

See also Abstract No. 1147

1194. **Report on non-consultant medical staffing needs: adult mental illness.** *Bulletin of the Royal College of Psychiatrists*, London, 1980, June, pp. 95-97.

This report has been drafted by a Working Party of the Manpower Committee of the Royal College of Psychiatrists, set up to study the medical staffing structure of non-consultant grades in the adult psychiatric service and provide an estimate of the staffing needed to give an adequate service. The following types of units were studied: (i) teaching hospitals providing a district service; (ii) district general hospital units; and (iii) psychiatric hospitals. The work load in six hospitals in each category was examined in detail under the following headings: (i) in-patient commitment; (ii) out-patient department; (iii) day hospital; (iv) on-call frequency and casualty duties; (v) teaching, study and research; (vi) type of patient; and (vii) number of non-medical professional staff. A table shows the patterns of work in the three categories of hospitals. In general, an 'average' consultant is supported by 2.5 trainees in the aspects of work outlined. If support is provided by non-trainees, the figure is two non-consultant career grade doctors. Other reports by the College, mentioned here, recommend a 25 per cent increase in the number of consultants. If this increase is realized, the necessary support in a consultant's team will fall to two trainees or 1.6 non-consultant career grade doctors. Local service needs and care patterns will determine adaptations of these recommendations.

1195. HALL, John N. **Ward rating scales for long-stay patients: a review.** *Psychological Medicine*, Cambridge, 1980, May, vol. 10, no. 2, pp. 277-288.

A standard set of criteria for designing and using a rating scale with psychiatric patients was developed by adopting those criteria on which there was a fair degree of agreement in four previous reviews of rating scales. They covered: description of the rating setting; description of rating procedure; and description of scale construction and evaluation. This set of criteria was used to review 29 published word rating scales for long-stay psychiatric patients. Five minimal criteria are suggested: (i) whether the content of the scale has been pre-selected on any rational basis; (ii) whether the observation period on which the ratings are based is specified; (iii) whether there are any norms; (iv) whether reliability has been assessed; and (v) whether validity has been assessed. Only four scales met these criteria. Some detailed recommendations are made. A list of 60 references to the literature is included.

1196. BHATTI, Ranbir S., JANAKIRAMAIAH, N. and CHANNABASAVANNA, S. M. **Family psychiatric ward treatment in India.** *Family Process*, New York, 1980, June, vol. 19, no. 2, pp. 193-200.

The evolution of family psychiatric ward treatment in India is reviewed, with special reference to developments at the National Institute of Mental Health and Neuro Sciences, Bangalore. The institute now has a two-storey family psychiatric centre with 20 units, 10 on each floor, with attached toilet. The facilities include a separate kitchen wing with 20 kitchens, a common dining hall, a large hall used for a variety of activities, and ample space for gardening and outdoor games. The philosophy of the

centre is outlined. Case reports are included. The patient's preference to be accompanied by a particular relative during family ward treatment was determined by means of a questionnaire. It was found that staying with the preferred relative was associated with a shorter stay and also that different preferred relatives had a differential effect on the duration of the hospital stay of the patient.

1197. GASPAR, D. **Hollymoor Hospital dementia service.** *Lancet*, London, 1980, June 28, vol. i, no. 8183, pp. 1402-1405.

As the proportion of old people in the population increases, so will the prevalence of dementia, and a service for demented patients is clearly becoming an essential part of the care of the elderly. The dementia service at Hollymoor Hospital, Birmingham, was established in July 1976. The facilities and management strategy of the service are outlined. In the first three years 230 referrals were received; the referral rate is increasing annually. Among patients under 75 years of age the sex ratio was 1:1; in older age groups women greatly outnumbered men. More men than women were in need of institutional care, and mortality was significantly higher in men. Significantly more men than women were referred for aggressive behaviour, and significantly more women than men for paraphrenia-like symptoms. Prompt domiciliary assessment, neuroleptic treatment, and community help arranged by the dementia service enabled more than a third of patients referred to be managed at home.

1198. MOULET, A. Fonctionnement, aménagement de l'hôpital psychiatrique et services de psychiatrie. **[Running and equiping a psychiatric hospital.]** *Techniques Hospitalières*, Paris, 1980, March, vol. 35, no. 414, pp. 47-52.

The old-style psychiatric hospital was designed to create physical barriers between the patient and society. The discovery of neuroleptic drugs has meant that the number of patients needing to be detained in special units of this kind has fallen, but potentially dangerous patients and the criminally insane need to be kept in secure units, as completely open psychiatric hospitals are a risk to society. The author examines the legal implications of recent changes in the approach to treatment of psychiatric patients. He refers to recent cases in France where nursing and medical staff have been censured for failing to detect that a patient was dangerous before he harmed a fellow patient or escaped and injured an outsider. Current French legislation is ambiguous as to whether high security units for dangerous patients should exist or not and as to who should be responsible for them if they do exist. The legal situation is therefore confused and it requires clarification.

1199. TENNENT, Gavin and TREVES-BROWN, Christopher. **A survey of psychiatric reports on potential special hospital patients.** *Medicine, Science and the Law*, London, 1980, April, vol. 20, no. 2, pp. 104-107.

The criteria for admission to the English Special Hospitals, beyond the requirement for treatment under conditions of special security, are poorly understood, but have important implications both for these new hospitals and for the proposed new medium security units. In a pilot study, 193 letters written by consultants at Broadmoor Hospital about patients whom they had seen at the request of the Department

of Health and Social Security were studied for the presence or absence of comments about various aspects of the patients' social, criminal and psychiatric histories and current mental states. Of the 193 letters, 102 were about patients whom the examining doctors felt should be in a Special Hospital (accepted) and 91 about patients whom they thought not to be in need of Special Hospital care (rejected). Social and psychiatric histories were similar for those accepted and rejected. A history of previous violence or of sexual violence was more common in the accepted group. Major differences were found in the current mental states described for the two groups of patients.

1200. MACANDREW, C. H., OVERTON, N. K. and WHITE, M. **Life in the community: a survey of the Prestwich Hospital Group Homes.** London, Psychiatric Rehabilitation Association, 1980. [iii], 26pp. bibliog. (Occasional Paper No. 5)

In 1971 Prestwich Psychiatric Hospital was listed as one of the 10 most overcrowded and understaffed hospitals in the country. This study examines the success of efforts to reduce the number of in-patients, in particular the rehabilitation and discharge to group homes of 100 long-stay patients. The 26 homes were found to be largely successful but as regards the physical aspects of care, the survey found that some residents were living in dirty houses, and some were eating poor diets.

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